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VOL. 71, NO. 1 JANUARY 1986

THE NEBRASKA MEDICAL JOURNAL

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118 Years

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Programs Being Developed

NEBRASKA ALLERGY SOCIETY

Saturday, 8:00 a.m. - 10:00 a.m.

The course is designed to review the diagnostic tests used in allergy, compare them and make recommendations for their use.

MISSOURI VALLEY DERMATOLOGIC SOCIETY

Saturday, 9:00 a.m. - 12:00 noon

Dermatology Update 1986 - A Review of New Developments in the Diagnosis and Management of Common Skin Conditions.

AMERICAN HEART ASSOCIATION, NEBRASKA AFFILIATE

Friday, 8:00 a.m. - 12:00 noon

Advances in patient care through prevention - good medicine and good business. The presentations will focus on the role and value of implementing cardiovascular disease prevention programs into the office practice with emphasis on strategies for enhancing patient care and business economics.

NEBRASKA ACADEMY OF OPHTHALMOLOGY

Saturday, 9:30 a.m. - 5:00 p.m.

Doctor Tom Roussell from the Bascom Palmer Eye Institute will speak on serious ocular infections including endophthalmitis. A morning hands-on session directed toward primary care physicians will address common ophthalmologic problems.

NEBRASKA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

Saturday, 9:00 a.m. - 5:00 p.m.

The Nebraska Chapter of the American Academy of Pediatrics' program will present an update on pediatric pharmacology.

NEBRASKA PERINATAL ORGANIZATION

Thursday & Friday, 8:00 a.m. - 5:00 p.m.

The Nebraska Perinatal Organization, NAACOG, ACOG, and the Nebraska State Department of Maternal-Child Health are combining resources to offer presentations on "Baby Doe," family-centered maternity care, DRGs in perinatal medicine, adoption, perinatal nutrition, and health care costs. Breakout sessions will spin off many of these plenary talks.

NEBRASKA SOCIETY OF PLASTIC & RECONSTRUCTIVE SURGEONS

Saturday, 10:00 a.m. - 11:30 a.m.

The Nebraska Society of Plastic and Reconstructive Surgeons will meet for their annual business meeting on Saturday, April 26.

NEBRASKA PSYCHIATRIC SOCIETY

Saturday, 1:00 - 4:00 p.m.

The Nebraska Psychiatric Society will present a program entitled "The Difficult Patient". The program will discuss evaluation and treatment of patients whose physical symptoms and complaints are either caused or exacerbated by their emotional problems. Frequently, these patients resist referral to psychiatric treatment, and the family practitioner or internist must consequently manage their treatment. This short course will discuss evaluation procedures and useful management techniques.

NEBRASKA CHAPTER, AMERICAN COLLEGE OF SURGEONS

Saturday, 10:00 a.m - 6:00 p.m.

This course is designed as a forum for presentation of topics of interest to general surgeons. Emphasis is placed on clinic reviews and original resident research.

Also Participating

NEBRASKA SOCIETY OF ANESTHESIOLOGISTS

NEBRASKA CHAPTER, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

NEBRASKA SECTION, AMERICAN COLLEGE OF OBSTETRICIANS & GYNECOLOGISTS

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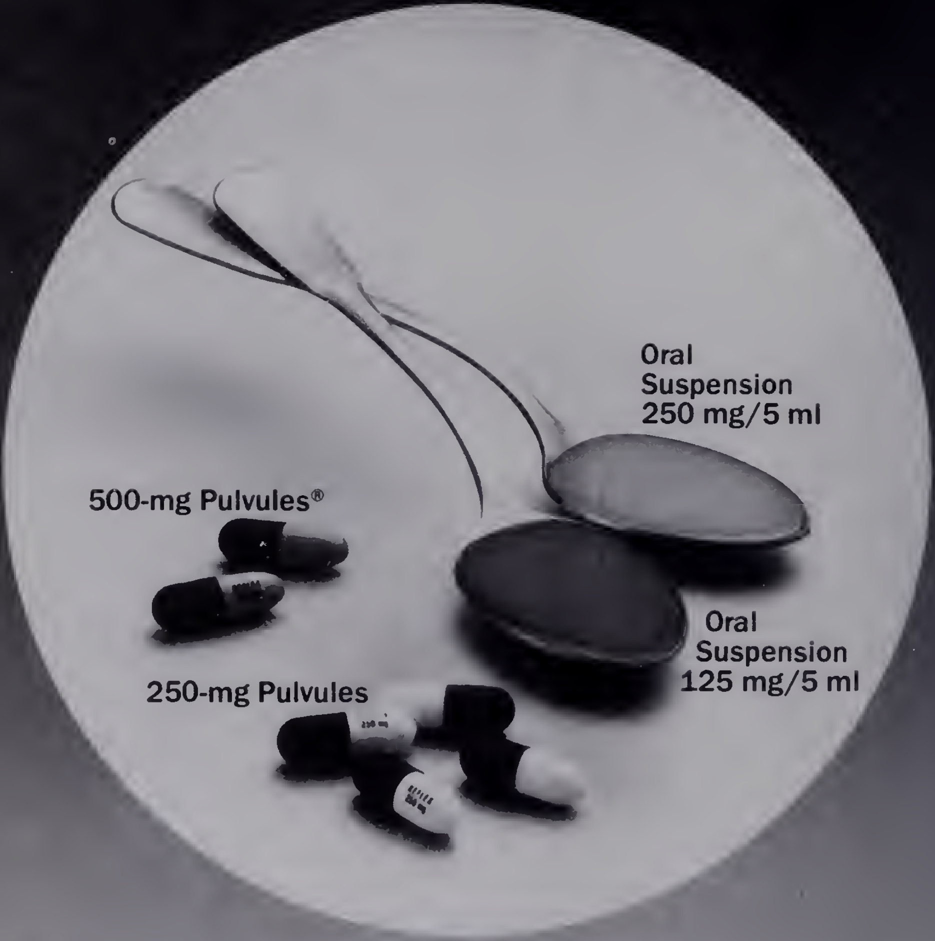

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EDITOR —
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5505 Ellendale Road,
Lincoln, NE 68510

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Manuscripts describing original clinical or laboratory research should be limited to 2,000 words and approximately 20 references.

Acknowledgements must be given when material from other publications is included. Provide names of authors, title of article, title of journal or book, volume number, pages, month and year, and publisher's permission to reprint.

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References: should be listed in the order in which they appear in the article and should be typed double-spaced. Authors are responsible for the completeness and accuracy of all cited references. Journal references should include authors' names and initials, title of article, abbreviated name of Journal (as listed in Index Medicus), volume number, inclusive pages, and year of publication. References to books should include authors, title, location and name of publisher, year of publication, edition, and page numbers.

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NEBRASKA
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118th Annual Session

April 25-28, 1986

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AMA News Notes

DRG Monitoring System of the AMA has received 389 written responses to its June, 1984, request for information on the impact of the prospective pricing system on hospitals. The physicians commented on the effect of diagnosis-related groups on quality of care, cost of care, length of stay, and administrative relations. Of the comments about quality of care, 66% stated that quality had deteriorated or would deteriorate if the system remains unchanged. They expressed concern that some hospitals encouraged patients to be discharged too early. If a patient has a second condition requiring treatment, or if he develops complications, some hospitals ask that the patient be readmitted at a later date for another stay. Some 85% of the physicians commenting on the cost of care reported that reimbursement in their hospitals was inadequate for one or more DRGs. Of the comments about length of stay, 65% stated that LOS had decreased under PPS. An additional 25% questioned the appropriateness of the LOSs permitted for certain DRGs, such as the 7.1 days allowed for acute leukemia. Forty-two percent of the comments discussing relations between physicians and hospital administrators said that these relations had deteriorated under DRGs. Physicians wishing to communicate their experiences, either positive or negative, may write to the DRG Monitoring Project, P.O. Box 10947, Chicago, Ill. 60610.

* * *

DRG-Based Reimbursement for physician services has not been demonstrated to be workable, AMA Executive Vice President James H. Sammons, M.D., said in a letter to the editor of the **New England Journal of Medicine.** 'There is virtually no experience with reimbursing physicians on a per case/per diagnosis basis,' Dr. Sammons said in the letter, which is scheduled to be published in the Nov. 7 issue of the **NEJM.** Commenting on an article by officials in the Office of Research, Health Care Financing Administration, Dr. Sammons took particular exception to a proposal to reimburse physicians for services to hospital patients by paying the hospital medical staff as a group. The proposal would

(Continued on page 32)

THE NEBRASKA MEDICAL JOURNAL

Body Image 1986

SUSHIL S. LACY, M.D.
Lincoln, NE

THE article entitled "Current Trends in Hypospadius Repair" in this months issue of NMJ brings up the thought: What is our body image in 1986? Since the era of classic Greek art and ancient Indian Hindu temple carvings (as seen in Passage to India), the female breast has become a symbol of femininity. The appearance of this structure assumed importance above and beyond those of a functioning secondary sexual organ. It is only in the relatively recent past that the latter have become part of our usual body image. Ever since Czerny in 1895[1] described his plastic surgical approach with breast defects have surgeons been involved in "making mountains out of mole hills," "uplifting the fallen," and "reduction of the masses"— with excellent results I might add. On the other hand, hypospadius repair has remained a surgical challenge over the years. To attest to this, more than 150 published reports claiming originality on some aspect of surgical technique (to improve success) were collected by Backus and DeFlice in 1960.[2] Since then this number has increased to more than 200 published "original" reports!

With the start of a "sexual awareness" in our "Western society" a few decades ago, it was only a matter of time that the phallus would emerge as a prominent organ of interest to surgeons practicing the art of hypospadology. The MAGPI procedure, as described in the article, is an example of advancing the meatus a few millimeters distally to accomplish a more "normal" functional and cosmetic result. Indeed, as the authors point out, there have been occasional reports criticising repair of distal (glandular) hypospadias. Could one call this procedure a Magnificent Allusion (of) Grand Phallic Illusion? In all fairness, it is that and much more. In my own experience (32 MAGPI procedures) the results truely are gratifying and justify the existence of this procedure. I would emphasize that the repair should not be taken lightly, even though this is suggested by the illustrations and the occurrence of morbidity in the same order as that of simple circumcision. The meatal variants must be assessed and appropriately corrected. On occasion skin coverage of the ventral penile shaft requires all the ingenuity and skill of the surgeon to accomplish the desired end result. I would like to further elaborate on the title "Current Trends in Hypospadius Repair."

Though Russell[3] described the first procedure for one-stage hypospadius repair in 1900, it was only in the mid 1950's and early 1960's that one-stage procedures became more popular in number and practice.[4] This trend persists. However, one must try to counter-balance prudence, which calls for a safe technique, with the desire to simplify surgery. There is no one good method for all types of hypospadius and there are certainly children that will require and do better with staged procedures. Perhaps of some interest is a procedure described in AD 150-200 by Heliodonus and Antyllus which consisted of amputation of the penis distal to the existing meatus. This reportedly corrected the chordee and brought the meatus to the tip of the shaft promptly and without complications, such as breakdown of suture lines and fistulae!

Another trend is towards lowering the age at which the repair is done. MAGPI procedures may be done at age 6 months. However, many pediatric urologists prefer to wait till the child is 12-18 months old to correct chordee and more severe types of hypospadius. Early repair along with a trend to keep mothers "rooming in" during hospitalization appears to reduce anxiety, fearful responses and both patient and parental emotional stress.

Other trends include use of optical magnification and microsurgical techniques along with a team of pediatric anesthesia and nursing personnel in the management of these patients.

Our body image has been enhanced by the contributions made by many disciplines. Plastic surgeons, pediatric urologists, pediatric surgeons, gynecologists and general surgeons in all combinations have helped create the body image of 1986. Now, if we could only transplant and customize the . . . .!

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Mobile ENT Team

ALAN FORKER, M.D.

WHO says doctors don't get sick? The purpose of this editorial is to relate a personal experience, that might be both amusing and/or educational to other physicians.

Recently, I awakened on a Monday morning with a very frightening experience. I had felt fine the night before with no warning symptoms of things to come except for some nasal congestion and chronic nasal discharge. When I got out of bed the following morning I discovered that I was so dizzy that I could not walk across the room, my legs were like rubber, and then I developed a cold, clammy sweat associated with nausea, but no true vertigo. My next question to myself was: when is the chest pain coming? But thank God, it never came. My wife had heard me talk about people having heart attacks without chest pain enough in the past, and apparently I looked unhealthy with my cold sweat and white complexion that she called the 911/mobile heart team. I heard the expected response when they arrived: "My God! It's Doctor Forker." But after the initial surprise, I was impressed with the competence of the nurse and paramedics involved. At this point, I think my wife needed the mobile heart team more than I did!

During my ambulance ride to the hospital, it is amazing what I noticed or thought about lying on my back: there were six lights on the ceiling of the ambulance, three were on and three were off; many of the bumps and curves in the road I did not recognize; have you ever noticed how many different patterns there are in different rooms and ceilings? Later in the day when I started feeling better, I was receiving an intraveous drip with an IMED counter and it had the cadence of one dash, two dash, three. As the day went on, that cadence more and more kept saying to me "You big dummy!"

I ended up following the emergency room evaluation in modified intensive care, because it was still initially unknown whether I was having a silent infarction, gastrointestinal bleed or some other unsuspected event. If I had had real vertigo, not just light-headedness, I might have been more attuned to the possibility of an acute labyrinthitis! Because of the nasal congestion and chronic discharge over the previous four weeks, I was evaluated by an ENT specialist, and I was impressed that he was immediately convinced that I had sinusitis and that was the total explanation for my illness. Subsequent sinus x-rays confirmed significant pansinusitis. Remember this occurred in the absence of fever, chills, facial pain or tenderness or any other systemic symptoms until the morning discussed above. I certainly will be more impressed in the future with the diagnostic term of sinusitis! Following treatment with decongestants and antibiotics, I immediately felt better. My nurse nicely summarized the situation when she later said "I knew all along it was in year head!"

I had always heard that doctors are lousy patients and don't follow other doctors' orders. I want you to know that I really did follow doctor's orders with one exception: as the day went on, especially the afternoon of my admission, I really was feeling quite well and discovered that I could first sit up without dizziness and later even stand up without dizziness. I tried this even in face of being told that I should stay on complete bed rest. But, I had to go to the bathroom, and specifically I needed to pass a stool, and I was told to use the bedpan and keep all stools. I solved the problem — I walked to the bathroom and sat on the pot with the bedpan on the stool! The only problem was: I knocked over my roommate's bedpan, and that made quite a ruckus and an interesting situation!

After a couple days of rest and further antibiotics, I was totally back to normal. It certainly is nice to have a mobile ENT team to take care of such weird patients! For those of you who wonder whether the mobile heart team works, it does and you don't need to go through a personal experience of your own to try it out - just take my word for it. But, it was a very educational experience, although the perspective of medicine is certainly much more comfortable from the standing up and physician's side. I thank my wife, my physician, and my friends for getting me through it.

Current Trends In Hypospadias Repair

Presented at the American College of Surgeons, Nebraska Chapter, April 27, 1985

ARNALDO F. TRABUCCO, M.D.
FRANCIS F. BARTONE, M.D., F.A.C.S., F.A.A.P.
University of Nebraska Medical Center, Department of Surgery, Section of Urology, 42nd & Dewey Avenue, Omaha, Nebraska 68105.

SURGICAL techniques for anterior hypospadias allow for normalization of the appearance of the penis with minimal complication. Herein, we summarize our experience with the meatal advancement and glanuloplasty (MAGPI) repair in children with glanular hypospadias.

Hypospadias is a congenital defect of the urethra, resulting from its incomplete development. This condition results in the meatus being located anywhere along the ventral shaft of the penis. It is almost always associated with chordee, which means that the penis, when erect, has a ventral concavity rather than a convexity.

By location, the meatus may be: anterior (70%), middle (10%) or posterior (20%). The location of the meatus is determined after the fibrous tissue causing the chordee is excised. Hence, the true position of the meatus can only be determined during the operation. It has been reported that the incidence of hypospadias is 8.2 per 1000 live births. Of these cases, 87% were classified as anterior hypospadias, either coronal or glanular in location.[1]

Over the past ten years, the surgical repair of hypospadias has undergone numerous changes. The repairs have attracted the interest of pediatric urologists who respect the technical challenge.

It is agreed by urologists that when the urethral meatus is positioned at midshaft or proximally, surgical repair with the creation of a new urethra is indicated to enable the patient to perform sexually. However, anterior hypospadias was not repaired in the past, as it was thought to be more of a cosmetic operation. These individuals can perform sexually and are able to deposit sperm in the vaginal vault without the repair. The recently developed MAGPI technique can correct this anomaly with the same morbidity as that of a simple circumcision.[1]

Newborn patients should be examined carefully for the presence of hypospadias. Should hypospadias be present, they should not be circumcised because the excess dorsal foreskin may be utilized in the construction of a neourethra.

In 1965, repairs for glanular hypospadias were complex and carried a 10-15% complication rate. In 1968, Spence and Allen described an operation which was chiefly designed to correct "skin chordee."[2] In their repair, the meatus was not advanced and the cosmetic result was poor.

In 1981, Duckett first introduced his technique of meatal advancement and glanuloplasty (MAGPI). This technique is well described[1] (figure 1). The ideal time to repair anterior hypospadias with a MAGPI is between one and two years of age.

Materials And Methods

Twenty children ranging from 1-12 years of age underwent a MAGPI procedure for glanular hypospadias at the University of Nebraska Medical Center. The first few patients operated upon had a catheter placed and were kept overnight. With continued interest in hospital costs, certain modifications were made. Now the operation is performed as a one day surgical procedure without a catheter.

Once the patient is anesthetized, 0.25% marcaine is injected at the penile base to prevent intraoperative erections and reduce postoperative pain. Epinepherine 1:100,000 is instilled into the glans tissue and dorsal foreskin aiding in hemostasis. The presence of

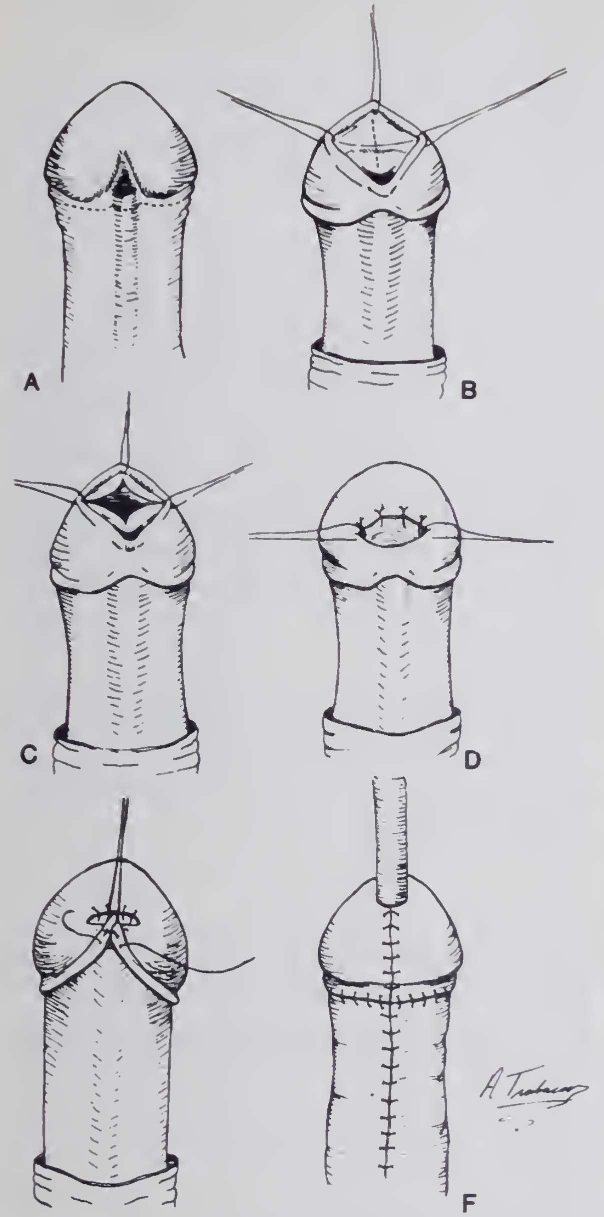

FIGURE 1: A) A circumferential incision is made 8 mm from the coronal edge and 8 mm proximal to the meatus. B) A bridge of tissue just distal to the meatus is present (which deflects the urinary stream ventrally.) C) A longitudinal incision is made inside the dorsal edge of the meatus to the distal glans groove. D) The dorsal meatal edge is sutured to the distal glanular groove in a transverse manner using 6-0 blue dyed chromic catgut. This flattens the dorsal meatal edge and the meatus is enlarged and advanced. E) The lateral edges of the glans are sutured together in the midline. This brings glanular tissue beneath the meatus and advances it. F) Skin is reapproximated with 6-0 chromic catgut.

chordee is assessed by intracavernosal injection of normal saline with a #27 gauge butterfly needle, after placing a tourniquet at the base of the penis, producing an artificial erection.[3] The MAGPI procedure is then performed.

There were no complications in these 20 patients, although two patients were not able to void postoperatively and required a single catheterization.

The patients return to the outpatient clinic on the second or third postoperative day for removal of the dressing unless they reside outside the city of Omaha. In these instances, the dressing is removed by the local physician.

Discussion

Only recently have the contraindications to the MAGPI repair been specified.[4] Patients with glanular hypospadias in which the meatus is widely gaping (fishmouth meatus), having greater than mild chordee, having absent corpus spongiosum and/or poorly mobile ventral skin are not candidates for this operation (figure 2-3). Frequently, the surgeon cannot make these observations until the patient is anesthetized, the fibrous tissue causing the

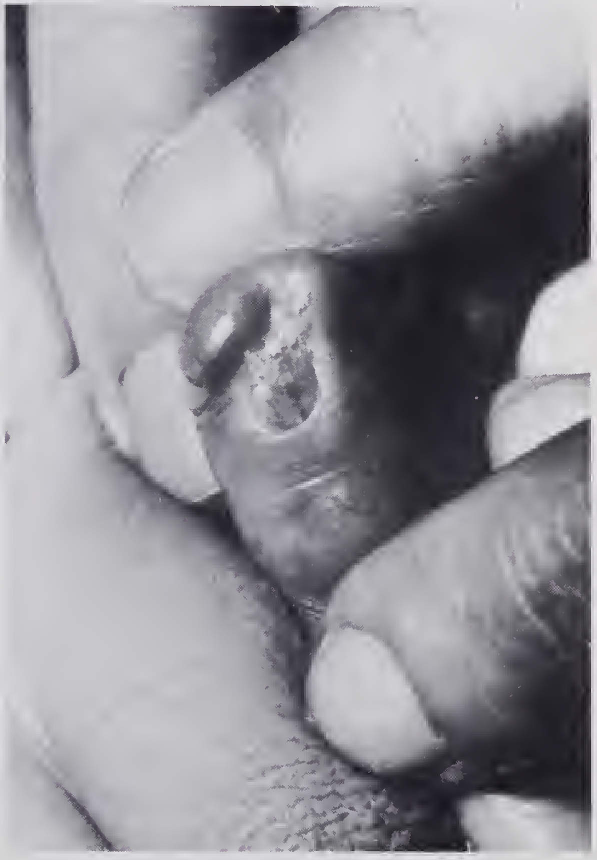

FIGURE 2: Shows a widely gapping fishmouth meatus. MAGPI procedure is contraindicated.

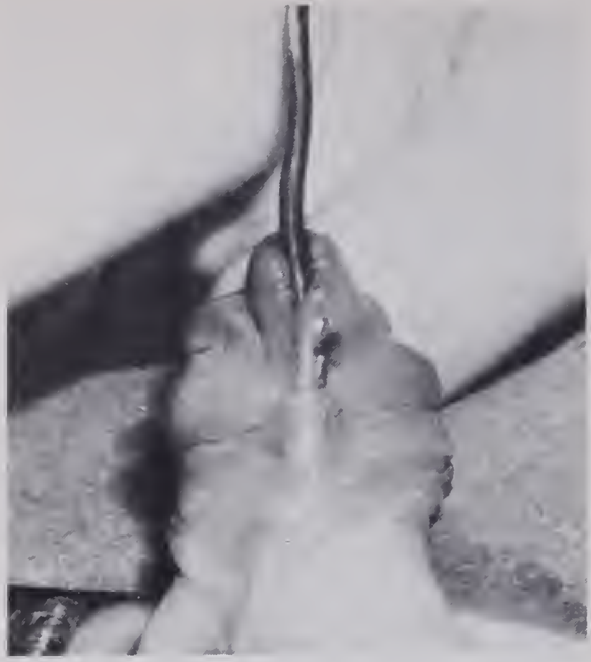

FIGURE 3: Shows a child with absent corpus spongiosum.

chordee is excised, and the penis is artificially erected. It is therefore imperative that the surgeon be familiar with alternative operations in order to be prepared for all possible eventualities.

When the surgeon suspects that the patient is not an ideal candidate for a MAGPI repair, he should modify his skin incision to allow for a different operative technique. This should be done initially, at the time the original skin incisions are outlined.[4,5] Without these modifications, the procedures available become limited for the surgeon.

The logical approach to anterior hypospadias entails the use of a meatal-based vascularized flap incision when the possibility of meatal variants, chordee, or absent corpus spongiosum exists preoperatively. If, intraoperatively, the contraindications to the MAGPI do not exist, then the meatal flap is amputated and the MAGPI is performed. If unacceptable fibrous chordee exists, then Duckett's "Transverse Island Flap" technique is employed. If there is a meatal variant, such as a fishmouth meatus, then the Mathieu "flip-flap" procedure may be utilized.[5]

Several authors have criticized operating on glanular hypospadias.[6] We have noted that the father of one of our patients, who has glanular hypospadias which was not repaired, brought his son to us with a similar condition. Despite the fact that the father did not want the operation performed on himself, he requested that we repair the hypospadias in his son to prevent the psychological problems that he had suffered during his adolescence. Duckett has also detailed similar experiences.[1]

For those few parents who wish to maintain the appearance of an uncircumcised penis, the MAGPI procedure can be modified to attain an esthetically acceptable appearance with the meatus at the tip of the penis and a foreskin that does not appear to have been operated upon.

No longer can one express satisfaction with a functionally adequate repair while ignoring the final cosmetic result. A penis that looks near normal should now be the goal of all hypospadias operations.[7]

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Comparison Of Operative And Percutaneous Catheter Drainage Of Intraabdominal Abscesses

STEPHEN P. MOESSNER, M.D.
JON S. THOMPSON, M.D.*
ROBERT P. LIEBERMAN, M.D.
From the Departments of Surgery and Radiology, University of Nebraska Medical Center

INTRAABDOMINAL abscess formation is not an uncommon event in the postoperative setting. The usual presentation is one of fever, abdominal pain and tenderness, ileus, and leukocytosis. In more advanced situations, shock and multiple organ system failure may supervene. Most abscesses can be detected and localized at an early stage with a high degree of clinical suspicion and employment of various imaging modalities.

Recently percutaneous catheter drainage has been recommended as an alternative to operative drainage for many of these abscesses. However, the indications for percutaneous drainage and its efficacy as compared to operative drainage remain unclear. To address this issue we reviewed our experience with the management of intraabdominal abscesses over a 4 year period.

Patients And Methods

We reviewed the charts of 44 patients who underwent treatment for 73 intraabdominal abscesses at University Hospital over a four year period ending in 1984. There were 23 men and 21 women. The records were reviewed to determine the patient's age and presentation, the etiology, number, location and method of detection of the abscesses, treatment of the abscess and outcome. An abscess was defined as a distinct fluid collection detected radiographically or intraoperatively. Sterile cavities were included when patients were on antibiotics but had clinical evidence of abdominal sepsis. Abscess drainage was considered successful if it disappeared radiographically, clinical sepsis resolved, and no recurrence followed. Criteria for failure were the requirement of subsequent drainage after catheter removal, and/or death in the face of persistent abdominal sepsis.

Twenty-five patients initially underwent operative drainage of 31 abscesses. Twenty-one patients underwent 24 percutaneous catheter drainage (PCD) procedures for 24 abscesses. Two patients were included in both groups as they underwent both forms of drainage for distinctly separate abscesses. All individuals were maintained on parenteral antibiotics.

The PCD procedures were performed by a trained interventional radiologist. Ultrasonography and/or computerized tomography allowed for precise localization and route planning. The procedure was performed using local anesthesia and sterile technique. A variety of methods were followed for catheter insertion as each case was individualized. The abscess was usually aspirated with a needle, through which a guide wire was placed. Dilators were then passed, followed by the catheter. A variety of closed drainage catheters were employed. In most cases, the abscess cavity was irrigated until clear with saline and the fluid sent for culture. A sinogram was then performed through the catheter to document its location. Sinograms were usually repeated periodically, and in 15 of the 25 PCD procedures, irrigation was done daily. In 7 patients catheter exchanges or additions were made.

Results

The age and sex distribution, underlying conditions and number of complex abscesses among the patients in the 2 treatment groups are shown in Table 1. Patients in the two groups were similar in age. Cancer, the need for total parenteral nutrition (TPN), and sepsis

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*Correspondence to: Jon S. Thompson, M.D., Department of Surgery, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68105.

TABLE 1

	Operative	PCD
Patients	25	21
Age range	13-83	13-77
mean	53.5	55.5
Sex male	18	7
female	7	14
Cancer	7	6
TPN	14	8
Sepsis	6	6
Complex abscess	10	7

were common problems in both groups. While there was a difference in sex distribution, we do not consider this clinically significant. Ten patients in the operative group had complex abscesses, including 6 patients with multiple abscesses and 4 with associated fistulae. Among PCD patients, 3 of the abscesses were multiple and 4 had fistulous communications.

The number and location of the abscesses are shown in Table 2. Overall there were 73 abscesses, 44 in the operative group and 29 in the PCD group. There were significantly more retroperitoneal abscesses in the operative group ($p<.05$) but the distribution was otherwise similar.

Diagnosis of the abscesses was made using several techniques. In the operative group, ultrasonography was employed alone in 12 patients, with computerized tomography (CT) in 4, and with an upper gastrointestinal series in another. CT was the sole modality used in 5 patients. Six patients had the diagnosis made by operation. In 3 of these patients, CT or ultrasonography was falsely negative, while in the other 3, there was no prior imaging. In 20 of the 21 PCD patients abscesses were detected either by ultrasonography alone (8), CT alone (2), or both (10 patients). One abscess was identified with proctoscopy.

In each group abscesses resulted from operation in 18 individuals. The types of operations performed are listed in Table 3. There were a significantly greater number of colo-rectal operations in the operative group ($p <.05$). The success of drainage was not influenced by the cause of the abscess in either treatment group.

The outcome of PCD and operative drainage of abscesses is shown in Tables 4 and 5. Eighteen of the initial 24 (75%), and 21 of 30 (70%) PCD attempts were successful. Sixteen of the initial 25 (64%) and 23 of 35 (66%) total operations were successful. This includes 11 of 14 (78%) successful direct drainage operations, and 12 of 21 celiotomies (57%). In the operative group 4 of 10 (40%) complex abscesses were effectively drained initially, including 3 of the 6 multiple and 1 of the 4 abscesses with fistulae. Of the remaining 3 with fistulae, 2 were successfully drained with a second operation, while the other patient died

TABLE 2

ABSCESS NUMBER AND LOCATION

	Operative		PCD	
Location	Initial	Recurrent	Initial	Recurrent
Subphrenic	7	1	9	2
Subhepatic	2	1	6	1
Paracolic	4	4	2	0
Interloop	4	1	1	1
Lesser Sac	2	2	2	0
Pelvic	6	2	4	0
Retroperitoneal	5	2	0	1
Other	1	0	0	0
Total	31	13	24	5

TABLE 3

ETIOLOGY OF ABSCESSES

	OPERATIVE	PCD
TYPE OF OPERATION		
ESOPH. STOMACH-DUODENUM	0	0
SMALL BOWEL	4	6
PANCREATIC-BILIARY-HEPATIC	3	8
COLON-RECTUM-APPENDIX	8	2
MULTIPLE OR OTHER	3	2
NO OPERATION	7	3

after three unsuccessful operations. In the PCD group, 3 of 3 multiple abscesses and 2 of 4 with associated fistulae resolved with the first procedure. Thus, 5 of 7 (71%) complex abscesses were effectively drained initially by PCD. The other 2 fistulae were closed with operations. In addition, 13 of the 15 (87%) PCD patients who underwent daily catheter irrigation were successes, as were 6 of 8 (75%) without irrigations. Catheters were left in place an average of 19.8 days (2 to 41 days).

Overall, 15 (60%) patients had postoperative complications. Twelve patients developed pulmonary problems, 7 had wound infections, and 3 had peritonitis. The mean postoperative hospital stay was 34.8 days. There were 4 deaths (16%), all related to persistant sepsis. Three of these patients had multiple system organ failure and the other suffered a myocardial infarction.

There were no complications directly related to the percutaneous catheter insertion. Seven (29%) patients had catheter exchanges or additions, and 5 of these were successful without further intervention. The mean post procedure hospital stay was 27.2 days and two of the patients were sent home with catheters in place. There were 3 deaths in the PCD group (13%), but only one of these was secondary to persistant abscess.

TABLE 4

OUTCOME OF PCD

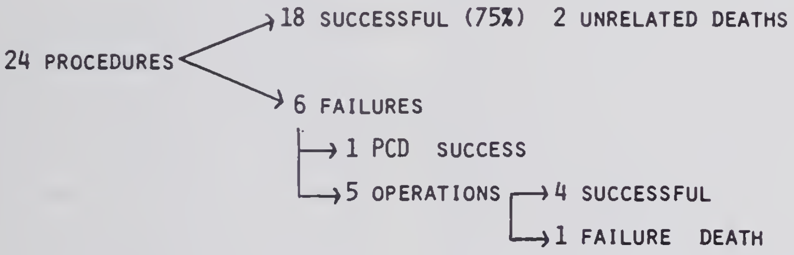
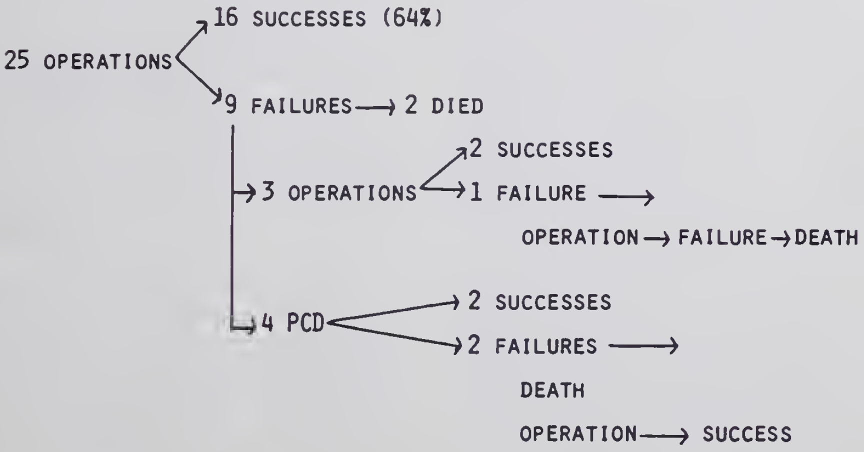


TABLE 5

OUTCOME OF OPERATIVE GROUP



Discussion

Intraabdominal asbcesses continue to be a major source of morbidity and mortality among surgical patients. The reported mortality rate for undrained abscesses of 80-100% attests to both the serious nature of the problem and the importance of drainage for survival. Until recently, the only effective method of abscess drainage was by operation. Abscess detection was frequently difficult and operation was undertaken for clinical suspicion of sepsis, with both a diagnostic and therapeutic aim. The development of computerized tomography and ultrasonography has allowed early, more precise abscess localization and characterization. This has enabled surgeons to directly drain abscesses early before septic complications arise. It has also facilitated percutaneous catheter abscess drainage (PCD), thus frequently obviating the need for an operation.

Computerized tomography (CT) has generally been considered the most accurate method of abscess identification. Sensitivity and specificity is approximately 95%.[1,2] Findings that are most consistant with an abscess have been well described by several authors.[3,4,5,6] Hematoma, inflammation, and fluid collections are common causes of misinterpretation. The sensitivity of ultrsound has been variously reported from 44% to 93.3%.[7] It is particularly effective in visualizing abscesses greater than 5 cm diameter, those in the paracolic gutters, and subphrenic abscesses. Intrahepatic, lesser sac and pancreatic abscesses are more easily confused with cysts and other masses. Obesity, open wounds, stomas, and intestinal gas cause artifacts and limit usefulness of ultrasonography when compared to computerized tomography where anatomical detail is greater. Many authors recommend the complementary use of both during PCD.[1,3,8,9,10] In our experience, both were found to be highly reliable for abscess detection, with CT superior for deep and interloop abscesses. Contrast studies, plain films, and gallium or WBC scanning may be helpful in equivocal cases.

We found that PCD of intraabdominal abscesses has a 70-75% success rate. This is similar to other reports of successful drainage of 69-92% of abscesses with PCD.[1,2,8,11] Gerzoff,[12] in a comprehensive review of over 1200 personal and collected PCD reports, found a 1.6% abscess recurrance rate. Abscesses were successfully drained by operation in 65% of our patients. Aeder[2] and Brolin[8] have reported success rates of 53% and 79%, respectively. Glick[13] reported that 80% of abscesses drained directly were cured compared to 61% with full celiotomy. Thus, PCD appears to be as effective as operative drainage of intraabdominal abscesses.

Percutaneous catheter drainage of intraabdominal abscess is associated with less morbidity than operative drainage. Complications directly attributable to catheter insertion are not common, and we had none. The incidence of major and minor complication has been shown to be 3% and 10%, respectively, in one series of 250 patients.[14] Complications reported have included enterocutaneous fistula, vascular damage, bowel perforation, and catheter misplacement.[8,15] Obviously similar technical problems can occur intraoperatively. Complications after operation are frequent and are due to several causes, including pneumonia, wound infection, and pain. Patients with cardiovascular and pulmonary disease, especially when elderly, also have an increased anesthetic risk. Johnson and Gerzoff [1] reported a complication rate of 4% for 27 patients treated percutaneously, and 16% for 43 patients who underwent operative drainage. Average post treatment hospital stays of 11.7 days and 21.2 days for PCD and operative patients, respectively, have been reported.[8] Our complication rate and hospital stay were also greater in the operative group than in the PCD group. Although many patients with abdominal abscesses already have associated complications, such as malnutrition, pneumonia, sepsis, and organ failure, additional morbidity can be avoided using PCD.

As familiarity and experience has been gained with the PCD technique, its applications have broadened. In fact, Gerzoff [1] believes that 90% of abdominal abscesses are amenable to PCD. In an effort to establish sound criteria for its use, a number of factors and their influence on outcome have been studied.

The cause of the abscess does not appear to correlate with the effectiveness of either operation or PCD. In one series 40 of 47 postoperative and 18 of 24 spontaneous abscesses resolved with PCD.[9] The cause of the abscess did not influence the success rate with either method of drainage in the present study. Abscess formation in the presence of ongoing abdominal contamination, peritonitis or gangrenous tissue requires an operative solution. Fungal abscesses also require operative drainage.

Does the presence of multiple abscesses preclude successful PCD? It has been suggested that 3 or more abscesses require operative drainage.[2,16] In our PCD group, the 3 patients with simultaneous abscesses were all completely drained. Gerzoff [17] recommends an attempt at PCD for multiple abscesses. We see no reason why PCD cannot be employed if each abscess is well defined, safely approached, and an operation is not otherwise indicated.

The impact of abscess location on success of drainage remains unclear. Karlsen and Frankuchen[10] found no difference in the success of PCD for pelvic, lesser sac, subhepatic and hepatic abscesses. It has been reported that 90% of subhepatic and subphrenic abscesses are effectively drainaged percutaneously but that 60% of pancreatic abscesses require operative drainage.[9] Operative drainage has been recommended for interloop, lesser sac and pelvic abscesses.[2] Gerzoff [17] now considers pelvic, splenic, appendiceal and interloop abscesses amenable to PCD. Miller et al[11] believe that abscess associated with diverticular and appendiceal perforation can be effectively drained percutaneously. Although the issue remains controversial, we have found that there does not appear to be any correlation between abscess location and adequacy of drainage.

Many authors have advocated PCD for abscesses with associated fistulae.[8,9,11,17] Gerzoff [9] noted that 6 such abscesses required a mean of 43.3 days for completion of drainage, compared to 20 days for the overall group. In another review fistulae did not prolong the mean duration of abscess drainage.[4] Our results with 8 such abscesses lead us to agree with those who would attempt PCD for abscesses with fistulae.

The presence of loculated or otherwise complex abscesses is considered an indication for operative drainage by Aeder.[2] The success rate is 45% for PCD of complex abscesses versus 82% for simple ones.[17] However, that author feels that a trial of PCD may be necessary to determine complexity and that a nonoperative approach is worthwhile since approximately 50% of patients avoided an operation. There was one abscess in the present study in which loculations were broken down during a PCD procedureand the abscess resolved. We agree that a trial of PCD is reasonable for such abscesses, with operations reserved for recurrent or persistent abscess.

Percutaneous drainage techniques have been described extensively.[1-20] Surgical principles, including asepsis, direct dependent drainage, and avoidance of damage to other structures, are followed. Van Sonnenberg et al[3] have suggested that a retroperitoneal approach is highly preferrable, but Gerzoff [1] believes that transperitoneal drainage is safer. We would not hesitate to use either approach provided it was in compliance to those guidelines mentioned above. The impact of catheter irrigation on eventual outcome does not seem significant. It may prevent catheter occlusion, but it may also prevent collapse of the cavity. It may be beneficial by enhancing debridement, lowering fluid viscosity, and possibly preventing loculations.[15] Persistant fever, leukocytosis, or inexplicably low drainage should prompt a repeat scan or contrast studies. If indicated, catheter additions or exchanges are recommended instead of operative drainage. We base this suggestion on the fact that 5 of the 7 catheter manipulations in our series were successful without operation.

We advocate PCD for abdominal abscesses that are localized radiographically, safely accessible by percutaneous catheter insertion, and not associated with an ongoing source of abdominal contamination or other reason to operate such as known cancer, obstructions or gangenous bowel. PCD can also be used as a temporizing measure for patients who at the time are too ill to tolerate an operation but need one eventually. Complex and multiple abscesses warrant an attempt at PCD. The procedure should be performed by someone with experience and in a center with proper scanning equipment. Close cooperation is required between the radiologist and the surgeon. Operative drainage should be employed when abscesses have failed to resolve after multiple PCD attempts, when operation is otherwise indicated, and in patients who by clinical evidence have abdominal sepsis and non invasive methods fail to localize an abscess.

Summary

Recently percutaneous catheter drainage has been recommended as alternative to operative drainage of intraabdominal abscesses. In the present study the efficacy of the two procedures was similar, both being successful in two thirds of patients. However, PCD was associated with less morbidity. PCD should be the initial approach to abscesses that are localized radiographically, safely accessible, and in whom there are no other indications for operation. The presence of complex and multiple abscesses should not discourage an initial attempt at percutaneous drainage.

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Neonatal Intracranial Ultrasound

WILLIAM L. HARRISON, M.D.*

JOSEPH C. ANDERSON, M.D.

Department of Radiology
University of Nebraska Medical Center

SINCE the pioneering work of Kosoff[1,2] et al., ultrasound of the intracranial contents in the neonate has become an accepted and valuable method in the evaluation of these patients. Advantages include low cost, ease of operation, and portability - allowing the patient to remain in his controlled environment during the examination. This article endeavors to provide an overview of the variety of clinical conditions that can be seen and monitored with neonatal intracranial ultrasonography.

Material and Methods

Between 1981 and 1985, over 500 neurosonograms have been performed on children at the University of Nebraska Medical Center. Ultrasound scans were obtained with an ATL Mark 500 mobile real-time ultrasound unit. A variable frequency transducer head was used with the scans obtained using a 5 MH or 7.5 MH transducer cyrstal. Most of the sonograms were performed in the intensive care nursery with the neonate in the controlled environment of the isolet. The scans were evaluated for sonographic patterns corresponding with pathologic processes seen in this series of patients. Where possible, the sonograms were compared with CT scans and autopsy material. The findings of a variety of intracranial pathologic conditions are described and illustrated in this paper.

RESULTS

Normal Anatomy

Several normal intracranial structures can easily be seen with ultrasound.[3-5] These include the ventricular system, the caudate nuclei, thalami, cerebellum, choroid plexus, and cerebral cortex (Figure 1). Normal variants such as cavum velum interpositum and mega cisterna magna are also seen. Recognition of these normal structures is important in differentiating them from pathologic abnormalities.

Hemorrhage

Evaluation of suspected intracranial hemorrhage in the premature neonate was the most common reason for neurosonography and was the most common pathology encountered in our patients (Figure 2,3). The severity of intracranial hemorrhage can be judged using a grading system of 0-4, based on location and extent of hemorrhage (Table 1). Follow-up for resolution or progression of these changes can also be easily accomplished. Extra-axial blood such as subdural hematomas can also be evaluated, but the periphery of the brain is not as easily visualized by sonography as the central brain structures.

TABLE I

Grading System for Intracranial Hemorrhage

Grade 0	Normal
Grade I	Isolated Subepedymal Hemorrhage (SEH)
Grade II	SEH With Intraventricular Hemorrhage (IVH), With No Ventricular Enlargement
Grade III	SEH With IVH and Ventricular Enlargement
Grade IV	SEH with IVH and Intraparenchymal Hemorrhage

Congenital Anomalies

Multiple congential anomalies presenting in the neonatal period can be identified:

1. Chiari II - The Chiari II malformation consists of elongation and caudal displacement of the 4th ventricle with an associated meningomyelocele. The remaining ventricles are enlarged as well as the massa intermedia. The lateral ventricles also assume a "batwing" appearance (Figure 4).

2. Dandy-Walker - This malformation consists of an extremely enlarged 4th ventricle with associated dysgenesis of the vermis of the

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*Reprint requests to William L. Harrison, M.D., Department of Radiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105

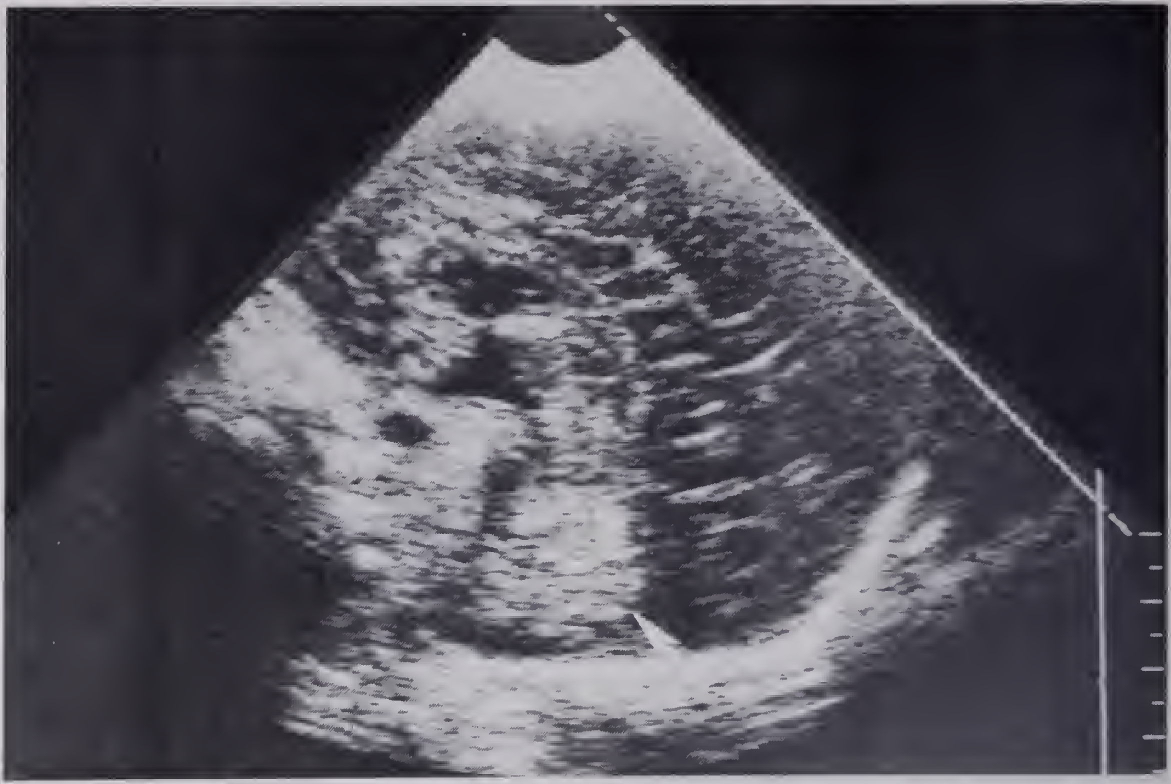

Figure 1A
Midline section showing cavum septum pellucidum, third and fourth ventricles and cerebellum (arrow). Normal subcal pattern also seen.

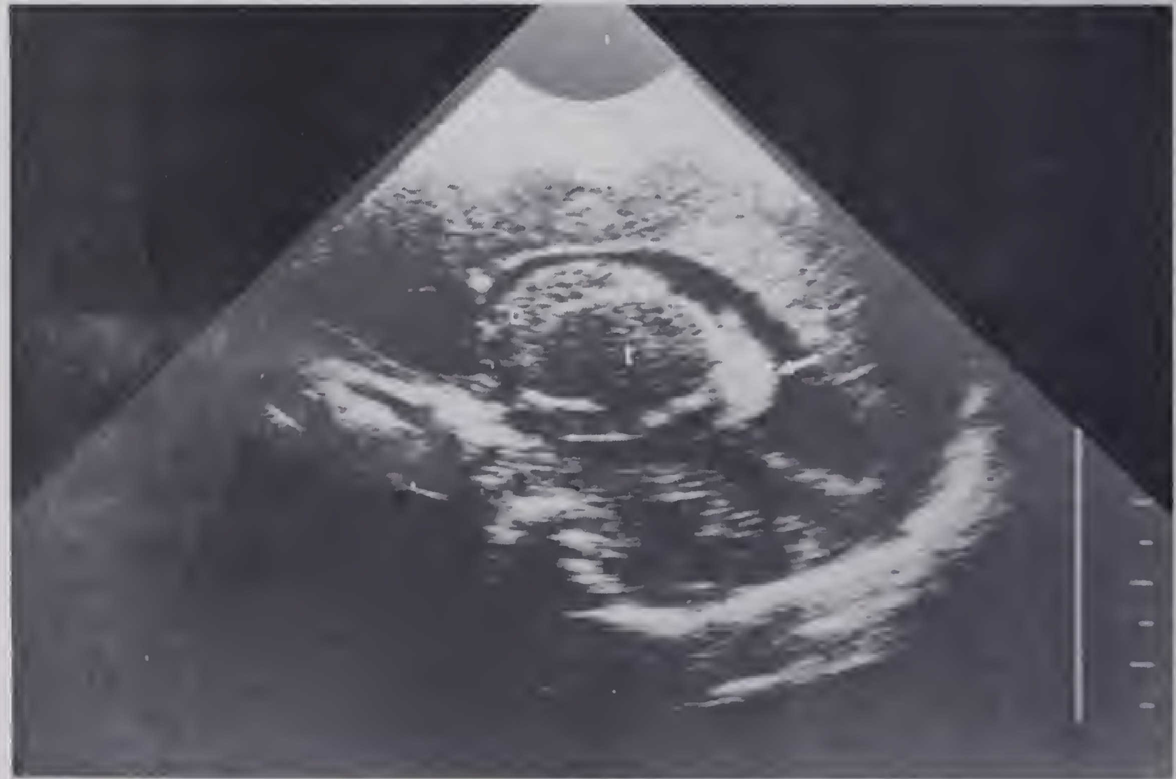

Figure 1B
Section through lateral ventricle with caudate nucleus (C), thalamus (T), and choroid plexus (arrow).

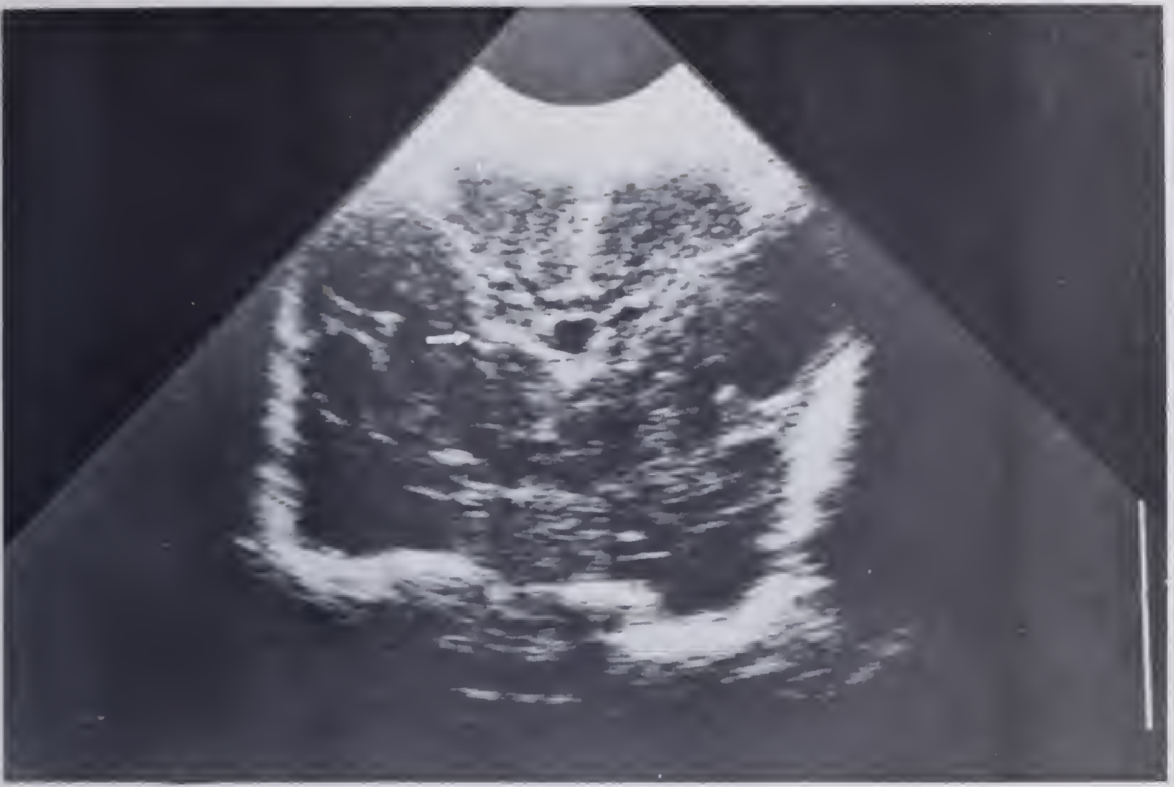

Figure 2
Coronal section showing Grade I SEH on right (arrow).

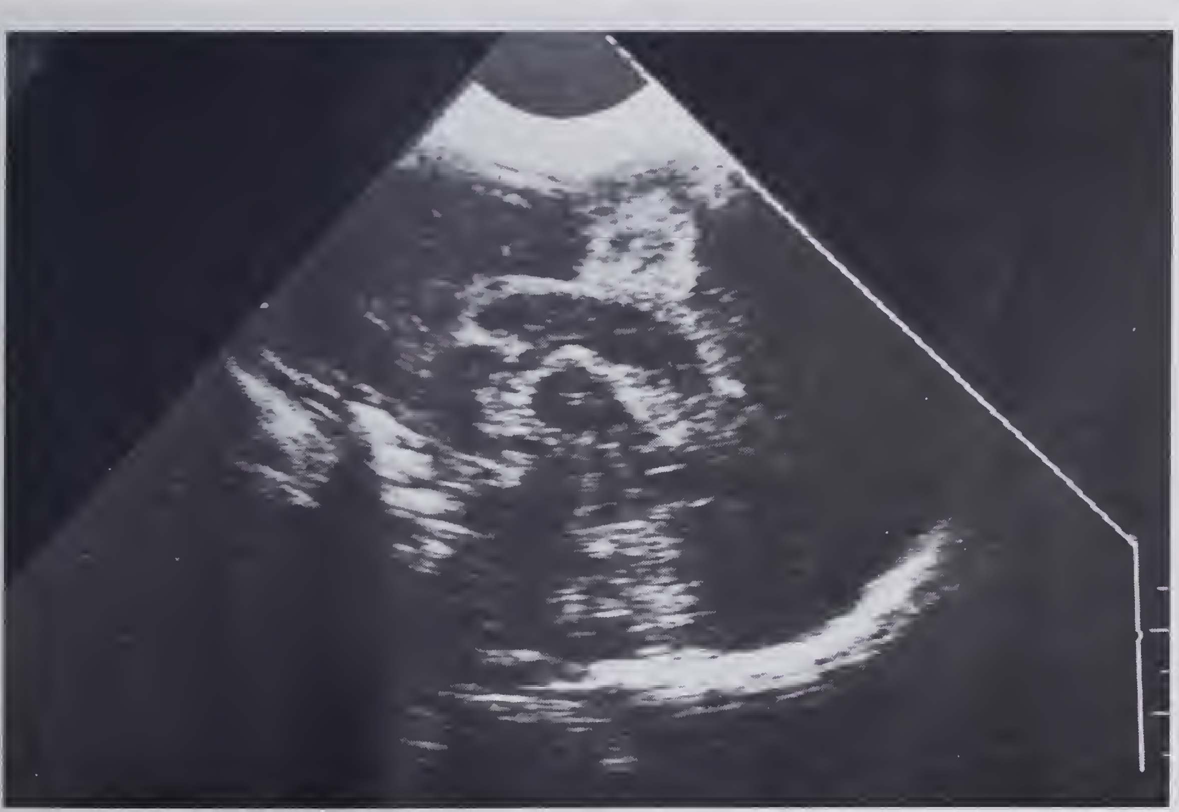

Figure 3A
Sagittal section showing Grade IV hemorrhage.

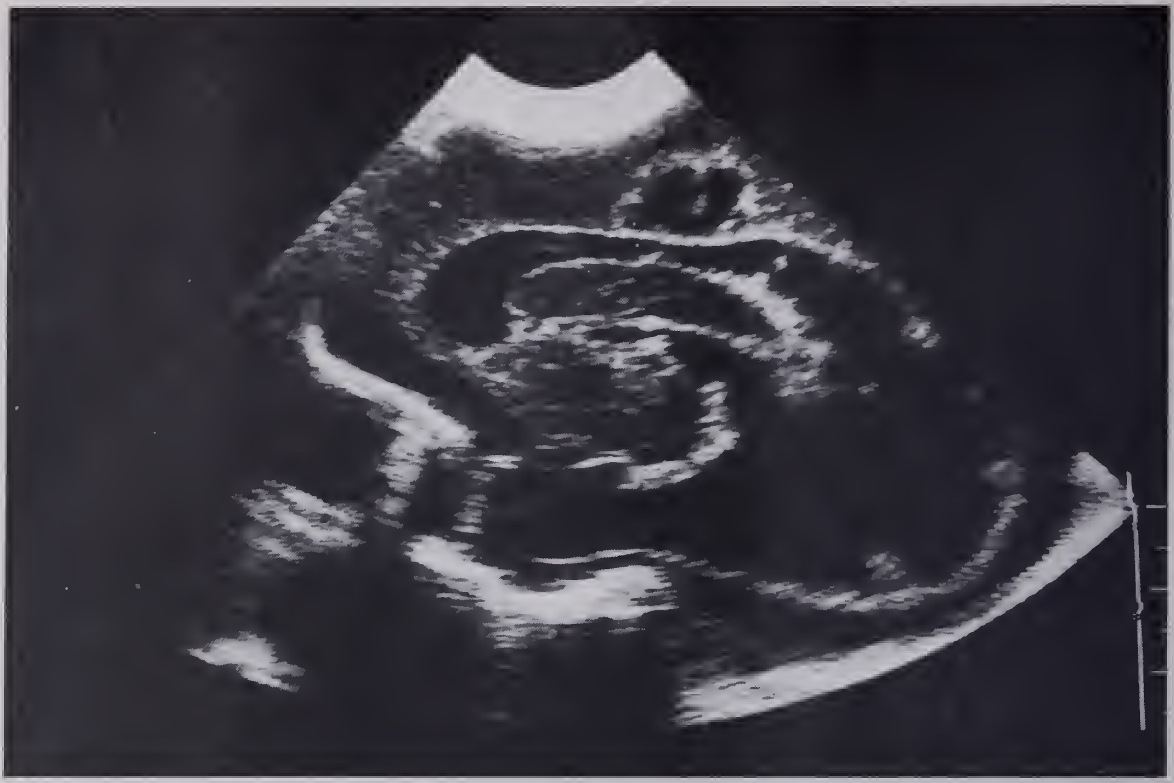

Figure 3B
Follow-up scan on same patient showing progression with increasing hydrocephalus and porencephaly.

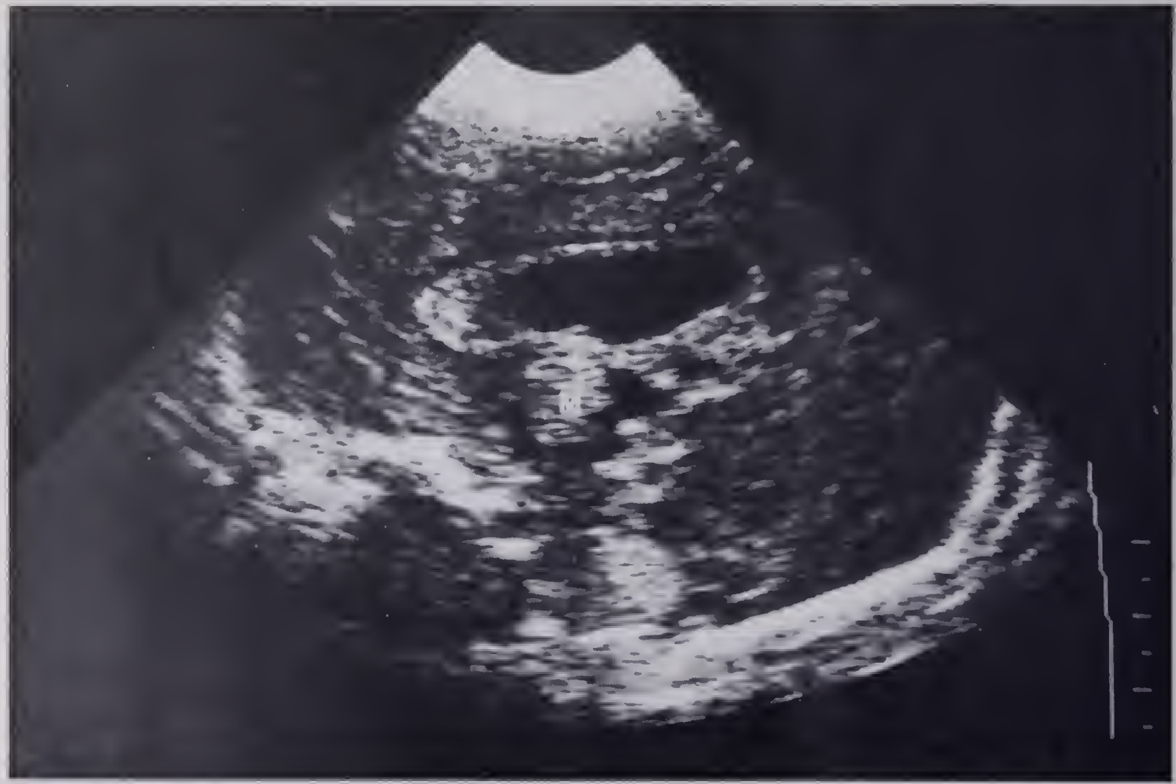

Figure 4A
Chiari II malformation sagittal section with large massa intermedia (M) in third ventricle and caudal displacement of fourth ventricle and cerebellum.

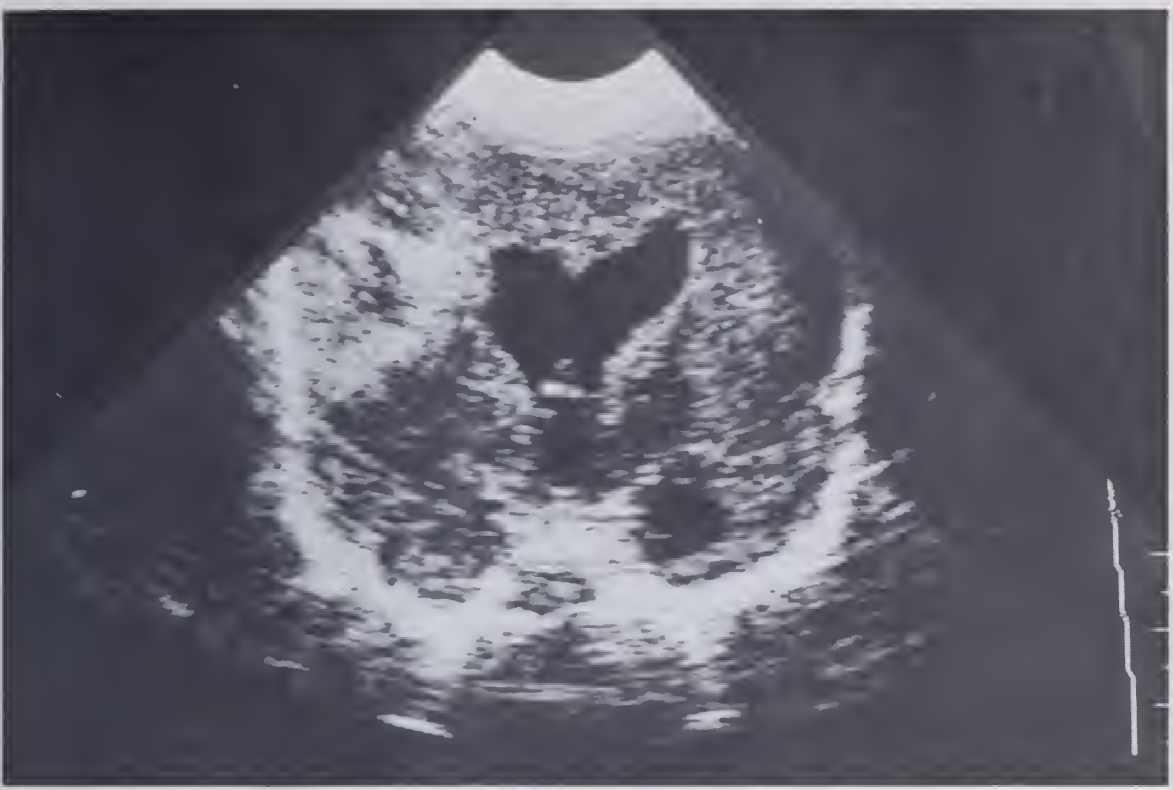

Figure 4B
Coronal section shows typical appearance of frontal horns. Intraparenchymal hemorrhage is also seen.

cerebellum. Hydrocephalus is also present. The degree of 4th ventricular enlargement and dysgenesis of the cerebellum is variable from patient-to-patient resulting in the Dandy-Walker variants.

3. Agenesis of the Corpus Callosum - The hallmark of complete agenesis of the corpus callosum is upward displacement of the 3rd ventricle. The lateral ventricles appear widely separated and the sulcal pattern is disturbed with the sulci radiating in a circular pattern away from the ventricles (Figure 5). Midline arachnoid cysts and lipomas of the corpus callosum can be associated with this anomaly.

4. Holoprosencephaly - This is a disorder of diverticulation in which only a large single ventricle is present. Fusion of the thalami is also seen. Three basic variations are seen - alobar, semi-lobar, and lobar holoprosencephaly. Alobar is the most serious and the affected infants rarely live beyond one year (Figure 6).

5. Colpocephaly[6] - This is a disorder of morphogenesis where fetal ventricular configuration persists into extra-uterine life. The disorder is characterized by marked enlargement of the occipital horns of the lateral ventricles. The findings can be isolated or occur with numerous other congential anomalies. Mental retardation is invariably associated with this anomaly.

6. Aqueductal Stenosis - This anomaly has a variety of etiologic factors including hemorrhage, infection, tumor and has been reported as an x-linked dominant trait. Association with Chiari II malformation may also be seen. On ultrasound examination, the lateral and 3rd ventricles are enlarged with 4th ventricle small or absent.

6. Hydranencephaly - This disorder is thought to result from intrauterine occlusion of the internal carotid arteries. The brain stem and cerebullum are normal, but only a thin mantle of cerebrum is seen surrounding a large collection of cerebral spinal fluid.

7. Hydrocephalus - Hydrocephalus is an alteration in cerebral spinal fluid kinetics where there is obstruction to the normal circulation of CSF with enlargement of the

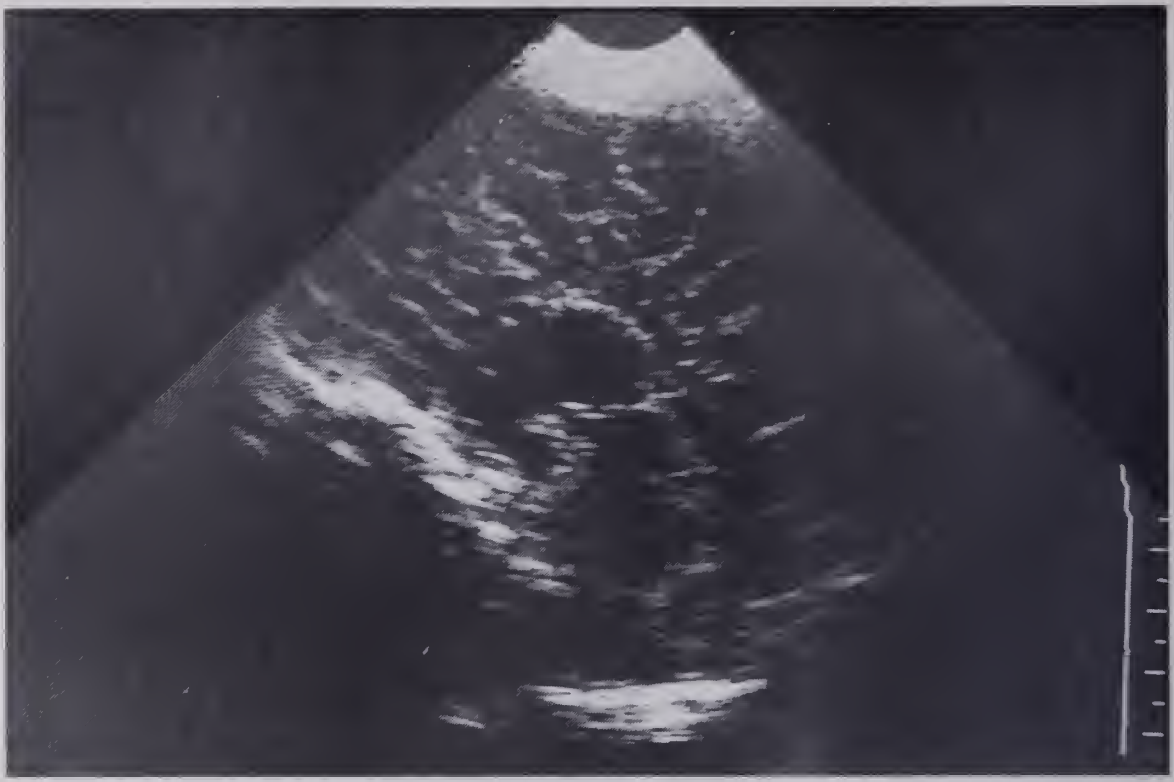

Figure 5
Agenesis of corpus callosum — Characteristic circular radiating pattern of sulci.

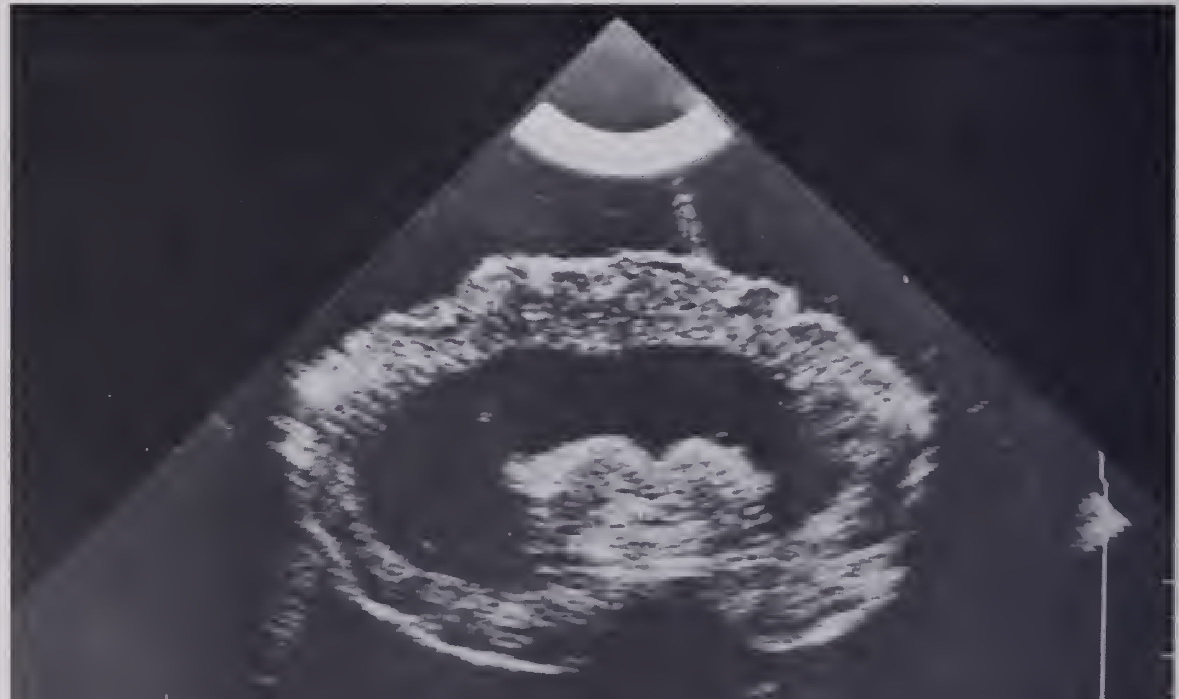

Figure 6
Holoprosencephaly — Post-mortem specimen with large single ventricle and fused thalami (T).

ventricular system and elevation of CSF pressure (Figure 7). Head size is normal or increased. A large variety of etiologic factors including hemorrhage, infection, and congential anomalies may lead to this condition. This process should be differentiated from ventriculomegaly where there is ventricular enlargement but normal CSF pressure. The infant's head size is normal to small. The condition is usually secondary to destructive processes or congential malformation.

Infection

The effects of the "TORCH" infections of the central nervous system can be recognized on ultrasound. The diseases cause a variety of findings including periventricular and intraparenchymal calcifications and areas of intraparencymal hemorrhage. The sonographic findings are frequently non-specific and must be correlated with the clinical information (Figure 8). Subdural effusion and thickening with increased echogenicity of the cortical sulci may be seen with meningitis.

Tumors

Tumors in children under two years of age are very rare. They encompass all cell types. These lesions often present with mass effect, hydrocephalus, and occasionally hemorrhages. The example shown is of a primitive neuroectodermal tumor (Figure 9).

Intervention

Operative intervention in neonatal intracranial disease is common with the necessity of ventricular shunt placement a frequent procedure. Ultrasound examination allows visualization of the shunt and the ability to determine its location both intra-operatively and postoperatively (Figure 10).

SUMMARY

In conclusion, ultrasound can be a valuable adjunct in the management of a fragile population of neonates, and provide a look at the intracranial contents and the pathologic processes which may affect them. Sonography is not only useful in diagnosis and follow-up of

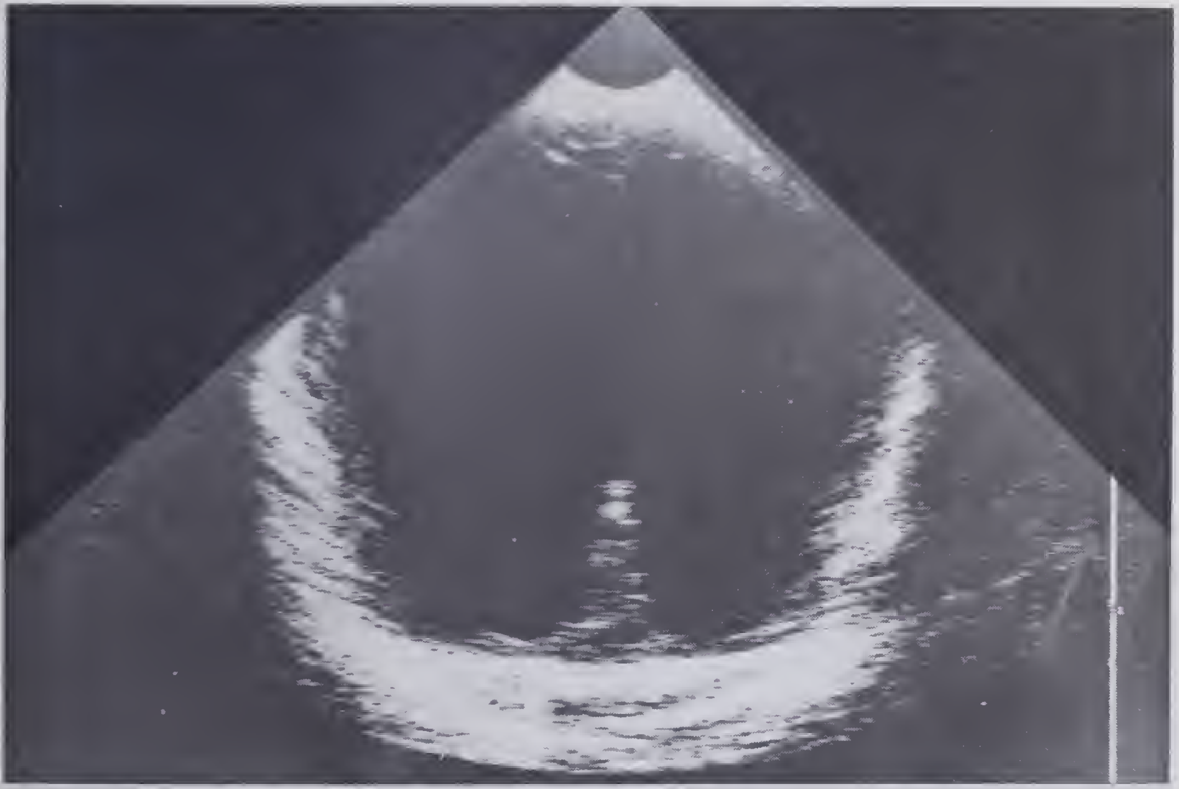

Figure 7
Hydrocephalus — Neonate with increased head size and massive hydrocephalus on examination.

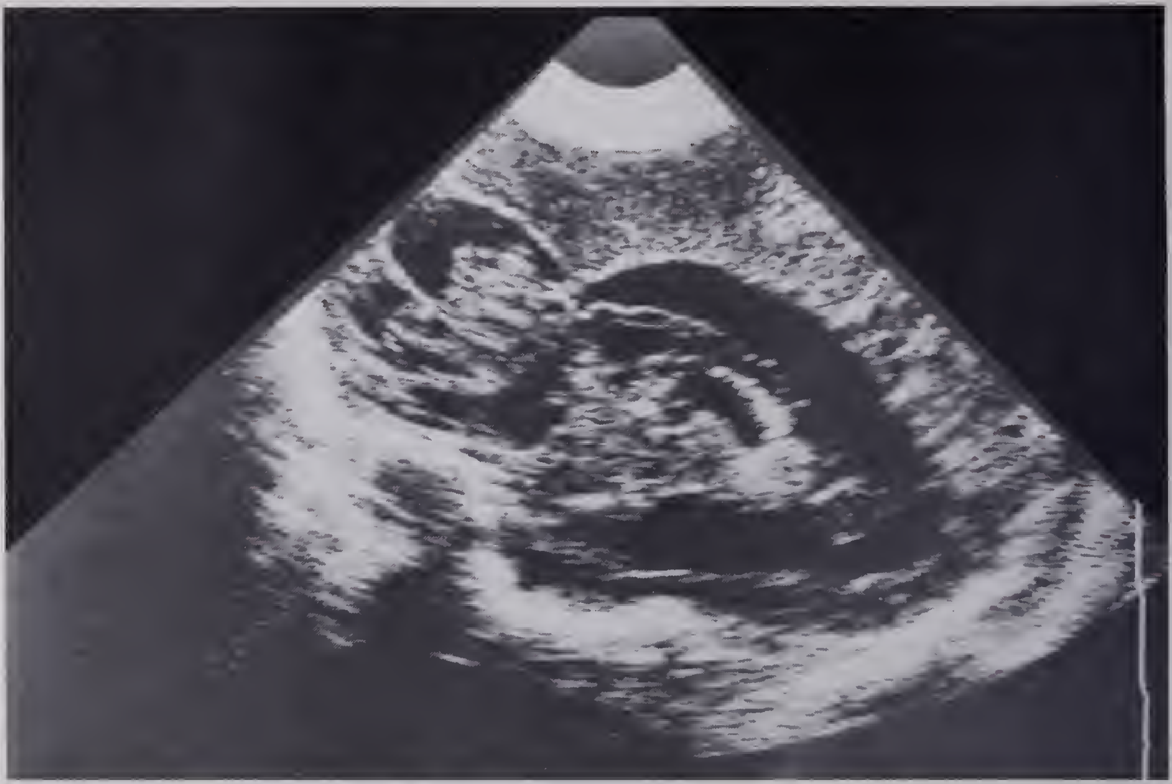

Figure 8
Change of cytomegalovirus infection with enlarged ventricles and areas of parenchymal destruction with porencephaly.

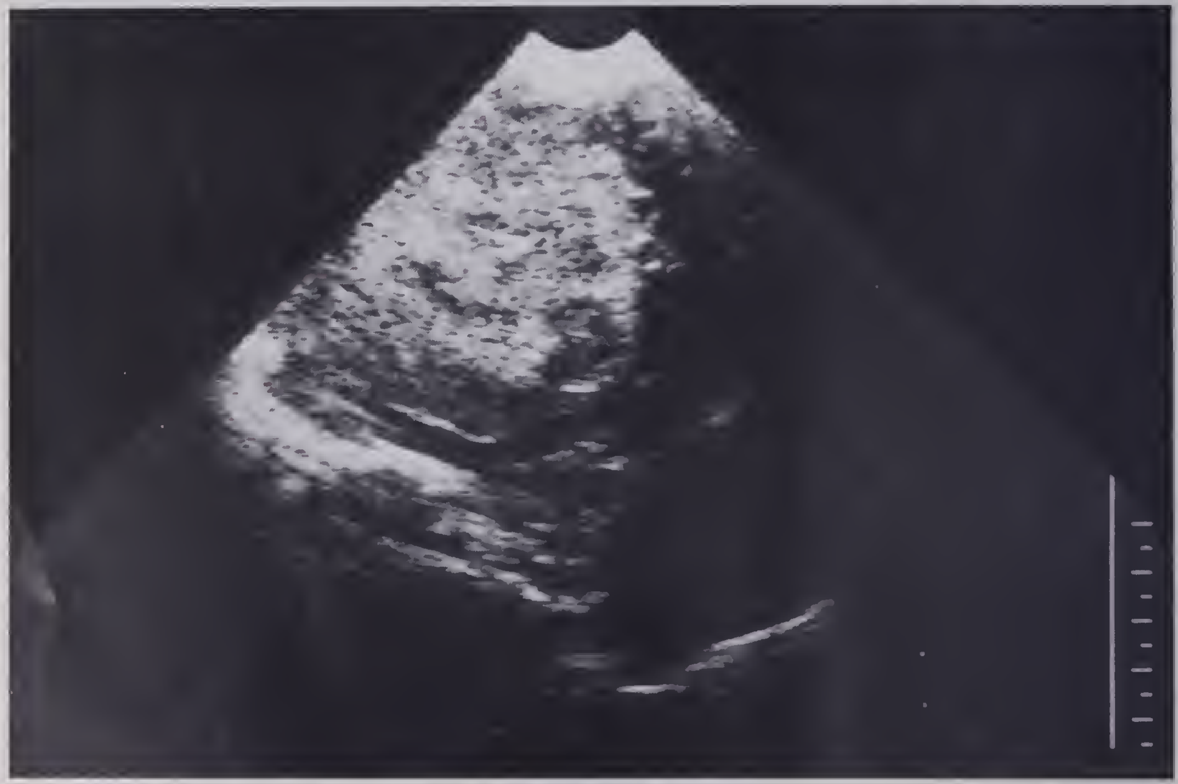

Figure 9
Primitive neuroectodermal tumor with marked mass effect.

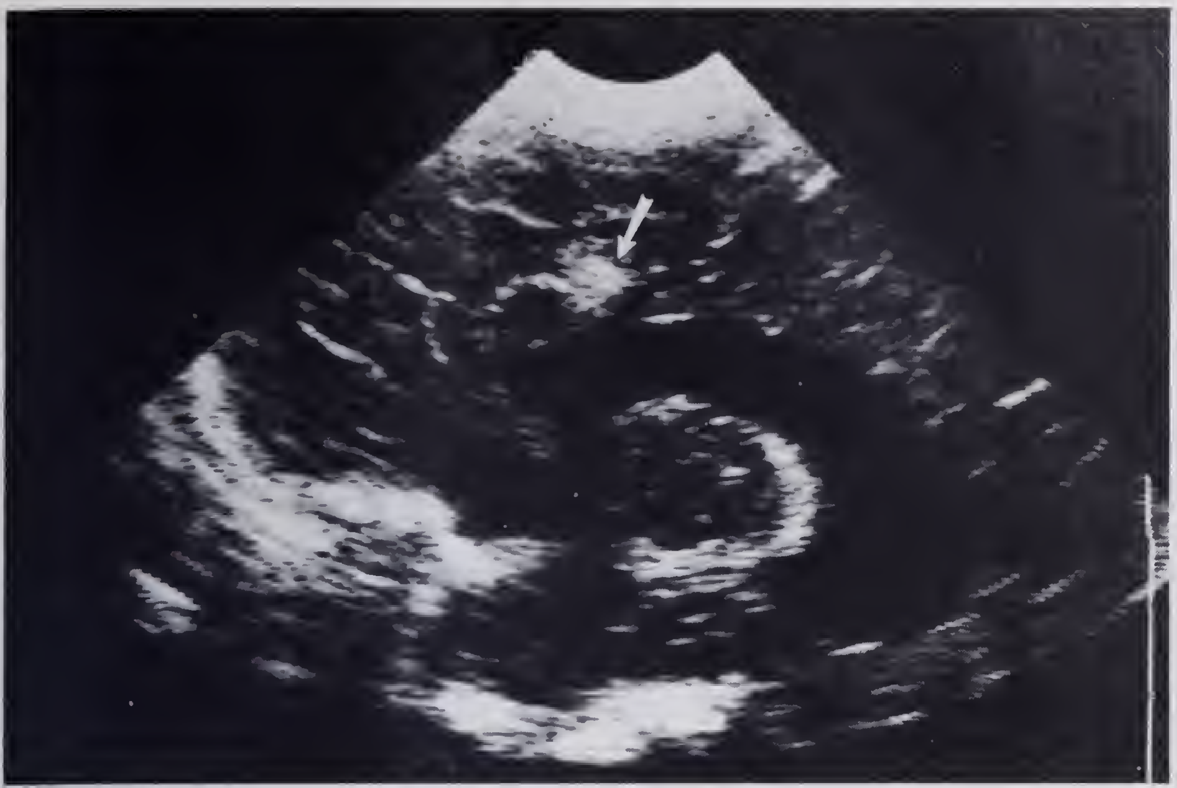

Figure 10
Ventricular shunt catheter (arrow) misplaced superior to anterior ventricular horn.

neonatal intracranial hemmorrhage, but also with other varieties of pathology and with evaluation of the patient during and following interventional procedures.

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CANCER UPDATE

Breast Cancer: A Challenge to Nebraska Physicians

Sponsored by the American Cancer Society
Editor: Dr. Gamini S. Soori, Omaha

PAULINE RAPTIS SLEDER, M.D.

SUSAN M. WILLIAMS, M.D.

University of Nebraska Medical Center
Department of Radiology
42nd and Dewey Avenue
Omaha, Nebraska 68105
(402) 559-4477

BREAST cancer is the leading cause of cancer death in women and accounts for 26% of all cancers in American women. Approximately 9%, or 1 in every 11 women, in the United States will develop breast cancer during her life. Unfortunately, in spite of advances in palliative treatment, the mortality from breast cancer has not been significantly altered since the 1930's.[1] The prognosis is dependent on the extent of disease at the time of diagnosis. Until a cure is found, early detection seems to be the only way to improve survival.

Several factors have been identified that may increase a woman's risk for developing breast cancer. The most important are increasing age, history of previous breast cancer in the contralateral breast, and history of breast cancer in a first degree relative (mother or sister). Other risk factors include age at first full-term pregnancy (greater than 35 years old), early menarche or late menopause, history of fibrocystic disease with atypical hyperplasia or dense dysplastic breast tissue, obesity and previous exposure to very high doses of radiation. It is important to remember that although these factors are associated with a slight relative increase in risk for developing breast carcinoma, this is a disease that may affect any woman. Every woman is at risk.

At the present time, approximately 90% of all breast cancers are still found by the patient. By the time the mass is palpable, the disease has usually spread to the axillary lymph nodes. Although physical examination remains vitally important, mammography has proved the most successful single method for diagnosing early breast cancer. Two large studies, one conducted by the Health Insurance Plan of New York (HIP),[2,3] and the other by the Breast Cancer Detection Demonstration Project (BCDDP),[4,5,6] have demonstrated the importance of mammography in detecting minimal cancer. Minimal cancer is that measuring one centimeter or less without evidence of axillary metastases.

The Breast Cancer Detection Demonstration Project was originally organized to stress screening and early diagnosis of breast cancer. Multiple centers around the United States annually screened thousands of women for a five year period, using history and physical examination, mammography and thermography techniques. Over 4400 breast cancers were diagnosed in just over one million women screened. Forty-two percent of all carcinomas were detected by mammography alone, while another 47% were detected by mammography and physical examination. Only 9% were found by physical examination alone. Of those cancers detected by mammography, approximately one-third were diagnosed as minimal cancers. Eighty percent had no evidence of lymph node involvement. Also, one-third were in women under 50 years of age, proving that mammography is an effective screen for the younger women.

The large study conducted by the Health Insurance Plan of New York confirmed that breast cancer mortality can be decreased or significantly delayed by screening mammography. Annual screening over a five year period led to a 30% decrease in mortality from breast cancer. Even longer follow-up showed a persistent reduction in mortality. Recent data in the Netherlands[3] supports the findings by the HIP, thereby supporting screening mammography in its ability to significantly decrease mortality by detecting early disease.

The goal of mammography is to detect minimal cancer. New technical advances in film and equipment have made possible quality imaging at a low radiation dose, less than one rad per exam. Newer imaging methods, for example, ultrasound, thermography, transillumination, CT, and MRI are being evaluated for screening, but have not yet demonstrated adequate sensitivity to substitute for mammography.

The two primary signs of malignant disease on mammography are: 1) a malignant mass and 2) microcalcifications. Microcalcifications vary from 150 to 300 microns in size. Irregular contour or rod-shaped calcifications with branching patterns are especially suspicious. They usually appear clustered, often contained within a 0.2 to 0.6 cm area, and may or may not be associated with a mass.[1] Not all malignancies contain microcalcifications, rather they may present as masses or areas of increased density. The most "classic" appearance for carcinoma is the spiculated or stellate mass. The spicules vary in length and radiate in all directions; they result from the desmoplastic response of tissue to tumor (Figure 1). Less specific signs on mammography which suggest malignancy include asymmetric parenchymal density and architectural distortion. Skin thickening and nipple retraction are other findings that appear later in the disease after spread has already occurred.

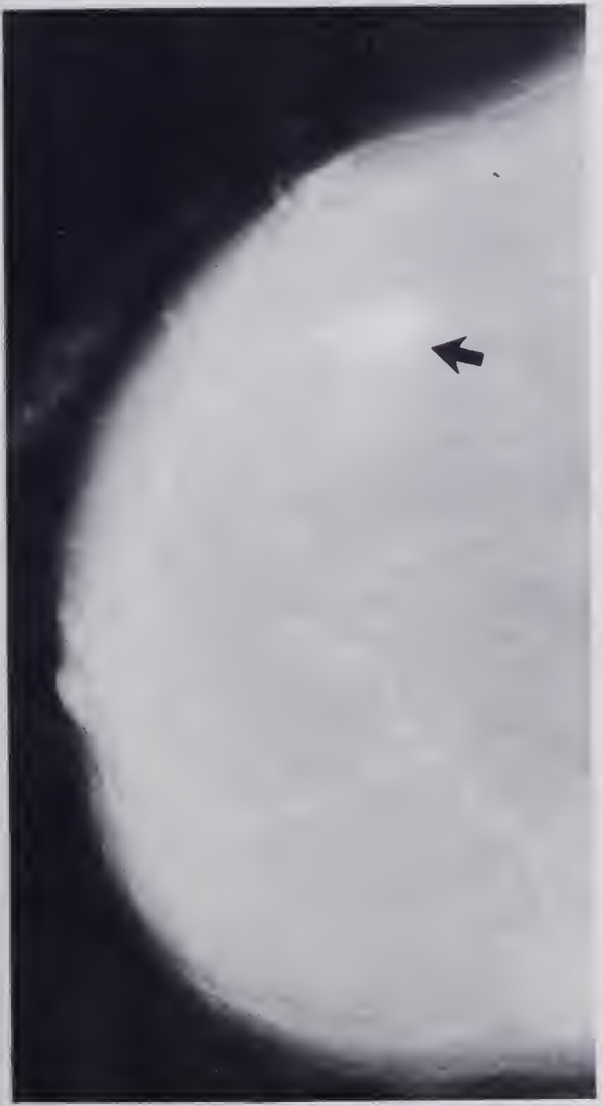

Figure 1
A small carcinoma in a 70 year old woman detected by screening mammography.

There has been much recent controversy about the potential risks vs benefits of mammography. A high incidence of breast cancer has been reported in women exposed to high doses of radiation. These were studies of women exposed to gamma and neutron radiation from the atomic bombings at Hiroshima and Nagasaki, women who received multiple fluoroscopies of the chest during pneumothorax treatment for tuberculosis, women treated with radiation for post-partum mastitis or other benign conditions of the breast, and women radium dial workers who ingested radiation while moistening and pointing their brushes with their tongues. However, current studies indicate that the risk of cancer from radiation at low diagnostic levels is quite small, estimated on the order of 0.0007 per rad dose. The potential risk is insignificant when compared to the demonstrated 9% risk that women have of developing breast cancer.

Recommendations for screening mammography established by the American Cancer Society and the American College of Radiology are as follows:

1. Baseline mammogram between the ages of 35 and 40 years.

2. Between the age of 40 and 50 years, mammography every 1-2 years. The interval is determined by the patient's physician with consideration of the patient's individual risk.

3. Yearly mammography after the age of 50.

The above recommendations concern screening of asymptomatic women. Symptomatic women should consult their physician and be considered for mammography.

The doubling time of a breast cancer is the major factor which determines the time available for discovery and possible cure. The neoplasm must be found in the time between reaching a size large enough to be detected and before it disseminates. A comprehensive screening program should include mammography, instruction in self-examination and physical examination by a physician.

Many hospitals and clinics are already providing screening mammography at reduced costs. With increased utilization, it should be possible to further decrease cost and increase the number of minimal cancers detected. There must be a concerted effort by the medical community of Nebraska to encourage screening mammography and breast self-examination. Such an approach would result in a decrease in the breast cancer mortality in this state.

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X-Ray of the Month

STEVEN SUKSTORF, M.D.
University of Nebraska Medicai Center, Omaha

JAMES J. PHALEN, M.D.
Veterans Administration Medicai Center, Omaha

THIS 32 year old active duty military male entered an Omaha area medical facility complaining of low back pain. On the frontal radiograph of the spine, a large liver calcification was seen. Past history was essentially negative. He was born in Arkansas and had never been out of the Continental U.S. What is your diagnosis?

Diagnosis: Echinococcal Liver Cyst

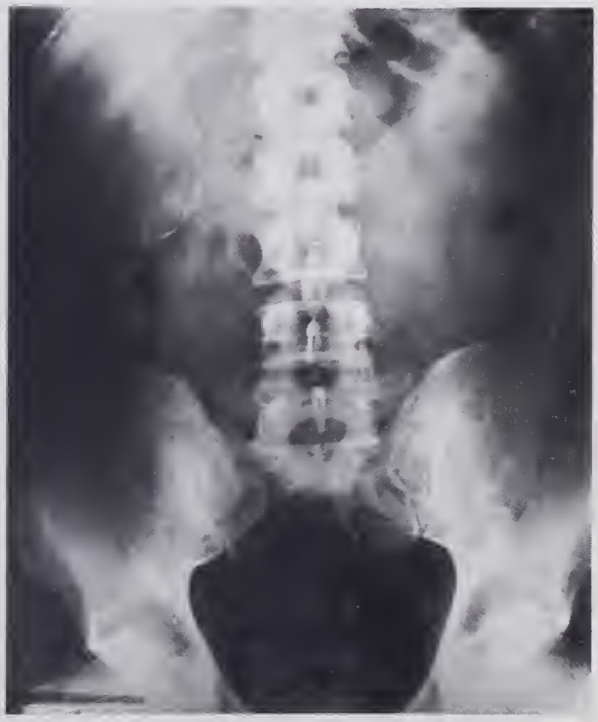
Echinococcal, or hydatid, disease is due to a small tapeworm infecting the liver. Echinococcus granulosus, prevalent in the Mediterranean region, South America, Australia, and New Zealand, is more common than the alveolar form, Echinococcus multilocularis (alveolaris), which is prevalent in Central Europe, Russia, and other parts of the northern hemisphere, including Alaska.[1,2]

The dog is usually the definitive host for Echinococcus granulosus; sheep, cattle, and camels are intermediate hosts. For Echinococcus multilocularis the most common definitive host is the fox; dogs and cats are less likely hosts. The intermediate hosts are mainly rodents.[1,3] Contaminated dog feces is ingested and humans become accidental intermediate hosts. The nematode enters the human body in egg form, dissolves, gains access by penetrating the intestinal wall then enters the portal circulation — 60% lodge in the liver, 25% in the lungs, and the remaining are distributed throughout the body.[1,2]

The lodged embryo forms a cyst which slowly enlarges, developing a central fluid collection. The cyst wall is an outer layer of reactive tissue from the host and an inner germinal layer containing the growing organism. Initially, unilocular daughter cysts develope due to fragmentation of the gerninal layers.[4] The outer layer often becomes calcified; this may be demonstrated on plain film, but is more often detected by computed tomography. Gas is not uncommonly seen either due to secondary bacterial infection and/or communication with the biliary system.[1] Plain films are not infrequently negative; calcification is the single most helpful finding. Hepatomegaly is common with liver involvement. CT demonstrates single or multiple cysts with well defined walls; the attenuation coefficient is near water density or greater; no evidence of rim enhancement is found. However, contrast studies do more clearly delineate the lesion due to enhancement of the surrounding parenchyma. Differential diagnosis includes other cystic lesions, especially benign non-parasitic cysts.[1]

Other areas less frequently involved by echinococcal disease includes kidney and collecting systems,. peritoneum, heart, orbits[5], muscle, and skin.[1]

Geographic location leads to suspicion; serologic and intradermal tests are of greater value. Percutaneous aspiration should be avoided because of complications due to intra-



peritoneal leakage or intravasation of cystic contents; allergic reactions may occur.[1]

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President's Page

UNIFIED MEMBERSHIP

Francis D. Donahue, M.D.

The AMA is stressing at this time the need for unified membership. This push is succeeding as in the past months a number of states have adopted unified membership. The principle reason for this is the need to strengthen the voice of the AMA. At present, only 46% of the physicians in the United States belong, hence, the AMA finds it difficult at times convincing Congressional committees or business leaders they represent all the physicians of the nation. These are changing times and often troubled times, and never has the need been so great to have the only voice speaking for us on a national level as strong as possible.

The many benefits provided by the AMA will be documented in future communications but for now I wish to touch on a few features regarding membership. We are aware of the fact that physicians who do not join will still be the beneficiary of the majority of these benefits. This points up a philosophical while basic aspect of the problem. This is a democratic organization and unlike many, no penalty is assessed for not joining. Yet, this organization's existence is one of the prime reasons the medical profession has continued to develop over the years and today has reached a level of excellence unequaled any place in the world. The 54% who opt to not support it philosophically or financially are doing so knowledgable that they will be identified with medicine's success, and the remaining 46% will carry their load as the need for its continuing success is imperative. This philosophy is hardly in keeping with what one should expect from members of such a highly learned profession.

The functions of the AMA are so far reaching no one could be expected to be in complete agreement with all their actions. Those who feel strongly opposed to joining should give some thought to other options or actions instead of simply not joining. Their opinions and support remain very important and are always encouraged.

In these turbulent times expressing disagreement will not be fruitful by detaching oneself from the governing organization. In order to present objections and constructive debate the most effective and democratic way is working within the group for changes instead of a "virtuous independence." County societies send delegates to the NMA and in turn delegates are sent from the NMA to the AMA House of Delegates. In addition, specialty societies have delegates in the AMA House as well, resulting in a truly democratic process. The function of all these delegates is to represent their membership and it is evident to anyone who has observed the House in action that the individual delegates meet this responsibility extremely well. Taking one's concerns to any of these representatives is one effective approach. Presenting problems directly to county or state committees is at times preferred. Taking an active role in functions of organized medicine is a very highly recommended modality.

As a vote by the NMA House of Delegates will be taken at the Annual Meeting in April, everyone should inform himself or herself on the issues both pro and con. Your county medical society's delegates can thereby be cognizant of the feelings of the membership.

Francis D. Donahue, M.D.
President

The Auxiliary

AUXILIARY HEALTH PROJECTS

Nebraska Auxilians will be participating in the AMA Auxiliary's 1985-86 Shape Up For Life Campaign which is "Community Services for Older Americans." Older Americans are the fastest growing age group in the United States; almost 28 million Americans are now over the age of 65. Because of this growth, there is an increased need for services that will allow older Americans to lead healthy, productive lives.

The Health Project Committee and the chairman of this particular area, Mrs. Leland Olson (Dorothy) of Omaha, are urging county auxiliaries and members-at-large to undertake a community project that will benefit this age group. Projects that might be considered are:

Nutrition — sponsor a class, taught by a dietitian that includes topics such as good nutrition, shopping and cooking for one or two people, or a class in basic cooking for widowed men.

Physical Fitness — sponsor an exercise program or "map the malls" — which is measuring and marking the walking areas in an enclosed mall so that senior citizens can exercise inside during inclement weather.

Safe Use of Medicines — plan a program with the assistance of the county medical society.

Accident Prevention — a program might include films and safety tips to prevent falls, fires and accidents while driving.

Intergenerational Programming — building intergenerational relationships can benefit both the young and old. "Adopt a Grandparent" could involve groups such as Brownies, Girl and Boy Scouts and residents of a nursing home.

In addition to the 1985-86 focus and Colo-Rectal Cancer Education, state president Ardis Grace has asked that we include some of these topics in our programming or community projects: Safety, Child Abuse, Teenager Suicide, Drug Abuse, Mammography, Organ Donor, Adolescent Pregnancy, Eating Disorders and International Health. The Fall Health Projects Newsletter contains additional resources on all of these subjects. Copies were distributed to county presidents, members-at-large and state board members. If you would like a copy, they are available by writing to the Health Projects Chairman.

Shirley Johnson (Palmer)
Lincoln, Nebraska
Health Project Chairman
Nebraska Medical Ass'n.
Aux.

* * *

Mark These Dates On Your Calendar — Important Auxiliary Dates

Legislative Day - January 29 in Lincoln
Winter Board Meeting — February 25 in Lincoln

Letter to the Editor

PLUM CREEK MEDICAL GROUP, P.C. CENTENNIAL

In 1884 Dr. Frank J. Rosenberg started a medical practice in Plum Creek, NE and practiced until 1910 at which time Dr. Justice E. Olsson purchased the practice. Dr. Olsson served the community until 1917 when he was called to the Army Medical Corp for one year. In 1940 Dr. P. Bryant Olsson joined his father and practiced medicine until 1941 when he was called in the Army Medical Corp during World War II. Dr. Justus Olsson practiced alone until Dr. P. Bryant Olsson returned from the military in 1946.

Dr. Justus E. Olsson died in 1947.

Dr. P. Bryant Olsson organized the PLUM CREEK MEDICAL GROUP, P.C. and served the community from 1940/46 until 1978 when he retired and moved to Arizona.

The present members of the PLUM CREEK MEDICAL GROUP, P.C. are:

Wayne K. Weston, M.D.	1966
John M. Ford, M.D.	1973
Sidney W. Jaeger, P.A.C.	1975
Mark R. Jones, M.D.	1980
Joseph S. Miller, M.D.	1984

The Plum Creek Medical Group, P.C. is affiliated with the medical schools of both the University of Nebraska and Creighton University for professional teaching of undergraduate medical students in the preceptorship programs.

They are located at 1103 Buffalo Bend, in one of the most modern facilities in the area, which is connected to the Tri County Hospital.

Medical services have thus been continuously provided to the people of Lexington, NE and the surrounding area for over 100 uninterrupted years by what is now the PLUM CREEK MEDICAL GROUP, P.C.

University of Nebraska Medical Center News:

Three students from the University of Nebraska Medical Center have been selected as the second recipients of the Michael S. Combs Memorial Scholarship.

Third-year medical students Mark D. Omar of Omaha, Douglas P. Tewes of Seward, and James J. Turek of Loup City, will each receive $1,000 from the scholarship established in honor of a medical student who passed away last year.

The scholarship was established in 1984 through the University of Nebraska Foundation by Mr. and Mrs. Ronald H. Combs of Grand Island. Their son, Michael, was a first year medical student at the Medical Center when he died in June 1984 following an asthma attack.

"Michael was growing and developing, both personally and scientifically, in a way that showed his tremendous future potential in the field of medicine," said Dr. Robert T. Binhammer, associate dean for academic affairs in the College of Medicine.

"No matter how bad he felt from his asthma, he was always cheerful and looked on the bright side of things," said Dr. B. A. Nugent, vice president of the Foundation.

Michael, a 1978 graduate of Grand Island Senior High School, took his undergraduate studies at Creighton University before enrolling in the University of Nebraska College of Medicine.

He was deeply involved in the Medical Center's chapter of the American Medical Student Association (AMSA). He was a member of AMSA's national Humanistic Medicine Task Force, which introduces students to alternate forms of patient recovery. He was also a member of the local chapter's Peer Support Program, which assists new medical students in adapting to the rigors of medical school.

"Michael was truly a consummate humanist and the kind of young man medical science needs in the worst way," said Dr. Nugent. "This scholarship is an important award that will provide a way for Michael's legacy to benefit future generations."

Coming Meetings

1986 ANNUAL SESSION — April 25-28 — Omaha Marriott

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

THIRD ANNUAL REVIEW & UPDATE — GENERAL PEDIATRICS AND FAMILY PRACTICE — February 26-March 5, 1986 at the Royal Waikoloa Hotel, Kona, Hawaii and March 5-12, 1986 at the Royal Lahaina Hotel, Maui, Hawaii. Sponsored by the University of Nebraska Medical Center and the Creighton University School of Medicine. Credit: 20 hours AMA Category I. Topics include: infectious diseases, adolescent medicine, allergies, rheumatology, and pediatric cardiology. Fee: $400, physicians and $250, residents/interns. Contact: Marge Adey, Center for Continuing Education, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68105, Phone: (402) 559-4152 or Hattie DeLapp, Creighton University School of Medicine, Phone: 1-800 228-7212, ext. 2550.

* * *

For information regarding the four below courses contact Marjorie Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105. Phone (402) 559-4152.

FAMILY PRACTICE REVIEW — April 14-25, 1986 at Omaha, Nebraska. Registration Fee: $850. 100 Hours of AMA Category I and 100 Prescribed Hours American Academy of Family Physicians.

FAMILY PRACTICE REVIEW — May 5-16, 1986. Registration fee: $850. 100 Hours of AMA Category I and 100 Prescribed Hours American Academy of Family Physicians.

UPDATE ON GENERAL PEDIATRICS — June 29-July 3, 1986. Jackson Hole Racquet Club, Jackson, Wyoming. Registration fee: $300. 16 Hours AMA Category I.

SPORTS MEDICINE UPDATE — July 7-10, 1986 at Jackson Hole Racquet Club. Jackson, Wyoming. Registration fee: $300. 16 Hours AMA Category I.

UNIVERSITY OF NEBRASKA MEDICAL CENTER UPCOMING CONTINUING MEDICAL EDUCATION COURSES

February 17-22, 1986, Strategies in Oncology/Hematology for the Family Practitioner, Saddlebrook Resort, Tampa Florida.

February 26-March 5, 1986, Review and Update: General Prediatrics & Family Practice, Sheraton Royal Waikoloa, Kailua, Kona, Hawaii.

March 5-12, 1986, Review and Update: General Pediatrics & Family Practice, Royal Lahaina, Kaanapali Beach, Maui, Hawaii.

March 2-7, 1986, 6th Annual Keystone Medical Ski Conference "Diagnostic Dilemmas - The Approach and the Answers", Keystone Lodge, Keystone, Colorado. This course is held in conjunction with the Dental Ski Conference and the Nursing Ski Conference.

April 14-25, 1986, Family Practice Revew.

May 5-16, 1986, Family Practice Review.

June 29-July 3, 1986, Update on General Pediatrics, Jackson Hole, Wyoming.

June 7-10, 1986, Sports Medicine Update, Jackson Hole, Wyoming.

July 23-26, 1986, Lake Okoboji Sports Medicine Conference, Lake Okoboji, Iowa.

For further information, contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105. Phone (402) 559-4152.

CREIGHTON UNIVERSITY

Jan. 26-Feb. 2, Headaches - A practical Review Including What's New (Pain Above the Collar Bones), 24 hours - Virgin Islands Cruise. Fee: $300.00.

Feb. 15-22, Pathophysiology and Treatment of Esophageal Disorders, 24 hours - Wyndham Rose Hall, Montego Bay, Jamaica. Fee: $300.00.

Feb. 5-12, Infectious Disease/Cardiovascular Disease, 24 hours - Turtle Bay, Oahu (weekly programs through Mar. 19). Fee: $75.00 with Travel Group.

Mar. 1-8, Primary Care of Adolescents, 24 hours - Posada Vallarta Hotel, Puerto Vallarta, Mexico. Fee: $300.00.

Mar. 2-9, Pulmonary Medicine/Infectious Disease, 24 hours - Virgin Islands Cruise. Fee: $300.00.

Mar. 13-14, Florida Tutorial (OB/GYN), 14 hours - Marriott Hotel, Orlando, Florida. Fee: $175.00.

April 16, Infectious Diseases Symposium, Omaha.

May 17-31, Update in Infectious Diseases and Endocrinology, 36 hours - Scandinavia Study/Tour. Fee: $400.00.

May 23-25, Family Medicine Update, Okoboji, Iowa.

May 26-29, Symposium on Foregut Disease, 24 hours - London, England. Fee: $50.00 with Travel Group.

June 16-30, GI Medical/Surgical Update, 36 hours - Germany Study/Tour. Fee: $400.00.

Sept. 18-30, Cardiology/Rheumatology Update, 36 hours - Ireland Study/Tour. Fee: $400.00.

For further information, contact the Division of CME, Creighton University School of Medicine, Omaha, Nebraska 68178 402/280-2550.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICAL ETHICS — March 7, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, Kansas.

ANNUAL POSTGRADUATE PEDIATRICS SYMPOSIUM — March 12-13, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

SAM E. ROBERTS NUTRITION SYMPOSIUM — March 25, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

AIDS: ARE YOU AT RISK? March 28, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

COMMON GASTROENTEROLOGY PROBLEMS — April 1, 1986 at Alameda Plaza Hotel, Wornall Road at Ward Parkway, Kansas City, Missouri.

AMERICAN MEDICAL SOCIETY ON ALCOHOLISM AND OTHER DRUG DEPENDENCIES — April 18-22, 1986 at the Westin St. Francis Hotel in San Francisco, California. Information may be obtained by writing AMSA DD, 12 West 21st Street, 7th Floor, New York, New York 10010.

SCHEDULED MEETINGS

THE NEBRASKA CHAPTER OF THE AMERICAN ACADEMY OF FAMILY PHY-

SICIANS will hold their 38th Annual Scientific Assembly, April 11 and 12, 1986 at the Marriott Hotel, Omaha, Nebraska. Contact: Phyllis Hansen, Executive Director, Nebraska Academy of Family Physicians, 401 No. 117th, Suite 202, Omaha, Nebraska 68154 (402) 333-5856.

AMA News Notes

(Continued from page 8A)

impose complex fiscal responsibilities on medical staffs that would interfere with their review and discipline activities. 'The ability of the medical staff to use diagnosis-related groups to control utilization would be limited, and the risk for pressures on improperly identified high-cost physicians would be great,' Dr. Sammons said. Medicare might be better served by a relative value schedule-based fee system, he said.

* * *

Professional Liability Costs, including the costs of premiums, defensive procedures, attorneys' fees, and uncompensated time away from the practice because of litigation, increased by $2 Billion in 1984 alone, according to the AMA Center for Health Policy Research. The $2-billion increase is equivalent to 2.7% of total expenditures on physicians' services during the year, the center said in a report. Most of the cost associated with professional liability is apparently caused by defensive medicine. When premiums and other expenses are taken as a whole, professional liability cost physicians a total of $10.9 billion to $13.2 billion in 1984. These estimates suggest that costs generated by the current liability system were responsible for 14.5% to 17.5% of the $75.4 billion spent on physicians' services in the United States last year.

* * *

Massachusetts Law requiring physicians to accept assignment for all services to Medicare beneficiaries has been challenged in a lawsuit filed by the AMA and the state medical society. The law allows physicians to charge no more than Medicare's 'reasonable charge' for services to beneficiaries. Physicians must agree to comply with the law as a condition of licensure. Gov. Michael S. Dukakis signed the measure into law Nov. 12. Under a pre-existing schedule, all physicians in the state are required to renew their certificates of registration by Jan. 15, 1986. The AMA filed a complaint Nov. 19 asking a U.S. district court to declare the new state law unconstitutional because it purports to regulate a federal program. In addition, it conflicts with federal Medicare legislation that authorizes physicians to collect more than the 'reasonable charge' set by the U.S. Dept. of Health and Human Services. 'It is inappropriate for a state to tie the privilege of licensure to mandatory acceptance of the Medicare-determined amount,' AMA Executive Vice President James H. Sammons, M.D., said in a statement. 'At the present time, Medicare beneficiaries in Massachusetts benefit from a very high rate of acceptance by physicians of the Medicare-determined amount. This legislation could discourage physicians from participating in the Medicare program,' Dr. Sammons said.

* * *

AMA's Professional Liability bill has been introduced by Sen. Orrin Hatch (R, Utah). Sen. Daniel K. Inouye (D, Hawaii) and Sen. James Abdnor (R, S.D.) are co-sponsors. The bill would provide federal grants as incentives for states to adopt designated tort reforms, such as mandating periodic payments for awards of future damages exceeding $100,000; eliminating the collateral source rule; limiting non-economic damages, such as damages for pain and suffering, to $250,000; and creating a decreasing sliding scale for attorneys' contingency fees. In addition, a state would have to adopt the following additional peer review and disciplinary reforms: Licensing fees from health care professionals would be allocated to the state agency responsible for

(Continued on page 9A)

AMA News Notes

(Continued from page 32)

disciplinary actions; hospitals would be required to have risk management systems; insurance companies in the state would be required to conduct risk management programs that would be mandatory for insured physicians; and insurance companies would be required to make data concerning malpractice awards available to state disciplinary agencies. State law would have to provide protections for expanded peer review activities by state and local professional societies. At an Oct. 29 press conference with the AMA, Hatch challenged 'the best minds in law, medicine, and public policy to concur, or else respond with concrete alternatives.'

* * *

Otis G. Bowen, M.D., who was governor of Indiana from 1973 to 1981, is President Reagan's nominee for secretary of Health and Human Services. If confirmed by the Senate, Dr. Bowen would be the first physician ever to head the federal agency. The AMA immediately expressed pleasure at the nomination. 'Dr. Bowen is a man with a long history of dedication to public service. The AMA looks forward to working with him and HHS in its continued commitment to providing the American people with the highest quality health care. The Association also is gratified that the President has selected a physician for this important position.'

* * *

Proposed Tort Reforms could save $1 billion in professional liability costs in 1986, according to an actuarial analysis that was commissioned by the AMA. Without the tort reforms, the nation's physicians will pay more than $3.6 billion in premiums next year, the consulting actuarial firm of Milliman & Robertson, Inc., New York, said in its report. The AMA General Counsel's Office commissioned the actuaries to review the potential one-time savings in professional liability costs if the four tort reforms in the AMA's proposed National Professional Liability Reform Act of 1985 were enacted. 'The AMA's actuarial studies are the most comprehensive effort to date to document the enormous cost savings — for physicians as well as their patients and society at large — from fair and elementary reform of obsolete legal rules,' AMA General Counsel Kirk B. Johnson said. The proposal to limit non-economic damages would have the largest effect on claim severity trends, the firm said.

* * *

Medical Society of Virginia and the Medical Society of Delaware became the fourth and fifth state societies this year to unify their memberships with that of the AMA. Earlier this year, the Mississippi State Medical Assn., the Kansas Medical Society, and the Utah State Medical Assn. approved unified membership with the AMA. Previously, Illinois and Oklahoma were the only unified states.

* * *

NEBRASKA
MEDICAL ASSOCIATION
118th Annual Session

April 25-28, 1986

OMAHA MARRIOTT HOTEL
Omaha, Nebraska

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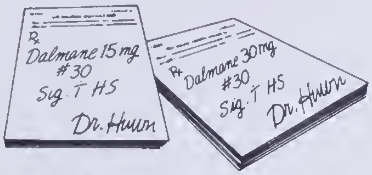
References: 1. Kales J, *et al: Clin Pharmacol Ther 12* 691-697, Jul-Aug 1971 **2.** Kales A, *et al: Clin Pharmacol Ther 18* 356-363, Sep 1975. **3.** Kales A, *et al. Clin Pharmacol Ther 19* 576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32* 781-788, Dec 1982 **5.** Frost JD Jr, DeLucchi MR. *J Am Geriatr Soc 27*:541-546, Dec 1979 **6.** Dement WC, *et al. Behav Med*, pp. 25-31, Oct 1978 **7.** Kales A, Kales JD *J Clin Psychopharmacol 3* 140-150, Apr 1983 **8.** Tennant FS, *et al.* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984 **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21* 355-361, Mar 1977



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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants An additive effect may occur if alcohol is consumed the day following use for nighttime sedation This potential may exist for several days following discontinuation Caution against hazardous occupations requiring complete mental alertness (*e g* . operating machinery, driving) Potential impairment of performance of such activities may occur the day following ingestion Not recommended for use in persons under 15 years of age Withdrawal symptoms rarely reported abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia Consider potential additive effects with other hypnotics or CNS depressants Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints There have also been rare occurrences of leukopenia granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e g* excitement, stimulation and hyperactivity

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VOL. 71, NO. 2 FEBRUARY 1986

THE NEBRASKA MEDICAL JOURNAL

NEBRASKA MEDICAL ASSOCIATION
ORGANIZED 1868
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1986
NMA Annual Session

Programs Being Developed

NEBRASKA ALLERGY SOCIETY

Saturday, 8:00 a.m. - 10:00 a.m.

The course is designed to review the diagnostic tests used in allergy, compare them and make recommendations for their use.

MISSOURI VALLEY DERMATOLOGIC SOCIETY

Saturday, 9:00 a.m. - 12:00 noon

Dermatology Update 1986 - A Review of New Developments in the Diagnosis and Management of Common Skin Conditions.

AMERICAN HEART ASSOCIATION, NEBRASKA AFFILIATE

Friday, 8:00 a.m. - 12:00 noon

Advances in patient care through prevention - good medicine and good business. The presentations will focus on the role and value of implementing cardiovascular disease prevention programs into the office practice with emphasis on strategies for enhancing patient care and business economics.

NEBRASKA ACADEMY OF OPHTHALMOLOGY

Saturday, 9:30 a.m. - 5:00 p.m.

Doctor Tom Roussell from the Bascom Palmer Eye Institute will speak on serious ocular infections including endophthalmitis. A morning hands-on session directed toward primary care physicians will address common ophthalmologic problems.

NEBRASKA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

Saturday, 9:00 a.m. - 5:00 p.m.

The Nebraska Chapter of the American Academy of Pediatrics' program will present an update on pediatric pharmacology.

NEBRASKA PERINATAL ORGANIZATION

Thursday & Friday, 8:00 a.m. - 5:00 p.m.

The Nebraska Perinatal Organization, NAACOG, ACOG, and the Nebraska State Department of Maternal-Child Health are combining resources to offer presentations on "Baby Doe," family-centered maternity care, DRGs in perinatal medicine, adoption, perinatal nutrition, and health care costs. Breakout sessions will spin off many of these plenary talks.

NEBRASKA SOCIETY OF PLASTIC & RECONSTRUCTIVE SURGEONS

Saturday, 10:00 a.m. - 11:30 a.m.

The Nebraska Society of Plastic and Reconstructive Surgeons will meet for their annual business meeting on Saturday, April 26.

NEBRASKA PSYCHIATRIC SOCIETY

Saturday, 1:00 - 4:00 p.m.

The Nebraska Psychiatric Society will present a program entitled "The Difficult Patient". The program will discuss evaluation and treatment of patients whose physical symptoms and complaints are either caused or exacerbated by their emotional problems. Frequently, these patients resist referral to psychiatric treatment, and the family practitioner or internist must consequently manage their treatment. This short course will discuss evaluation procedures and useful management techniques.

NEBRASKA CHAPTER, AMERICAN COLLEGE OF SURGEONS

Saturday, 10:00 a.m - 6:00 p.m.

This course is designed as a forum for presentation of topics of interest to general surgeons. Emphasis is placed on clinic reviews and original resident research.

Also Participating

NEBRASKA SOCIETY OF ANESTHESIOLOGISTS

NEBRASKA CHAPTER, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

NEBRASKA SECTION, AMERICAN COLLEGE OF OBSTETRICIANS & GYNECOLOGISTS

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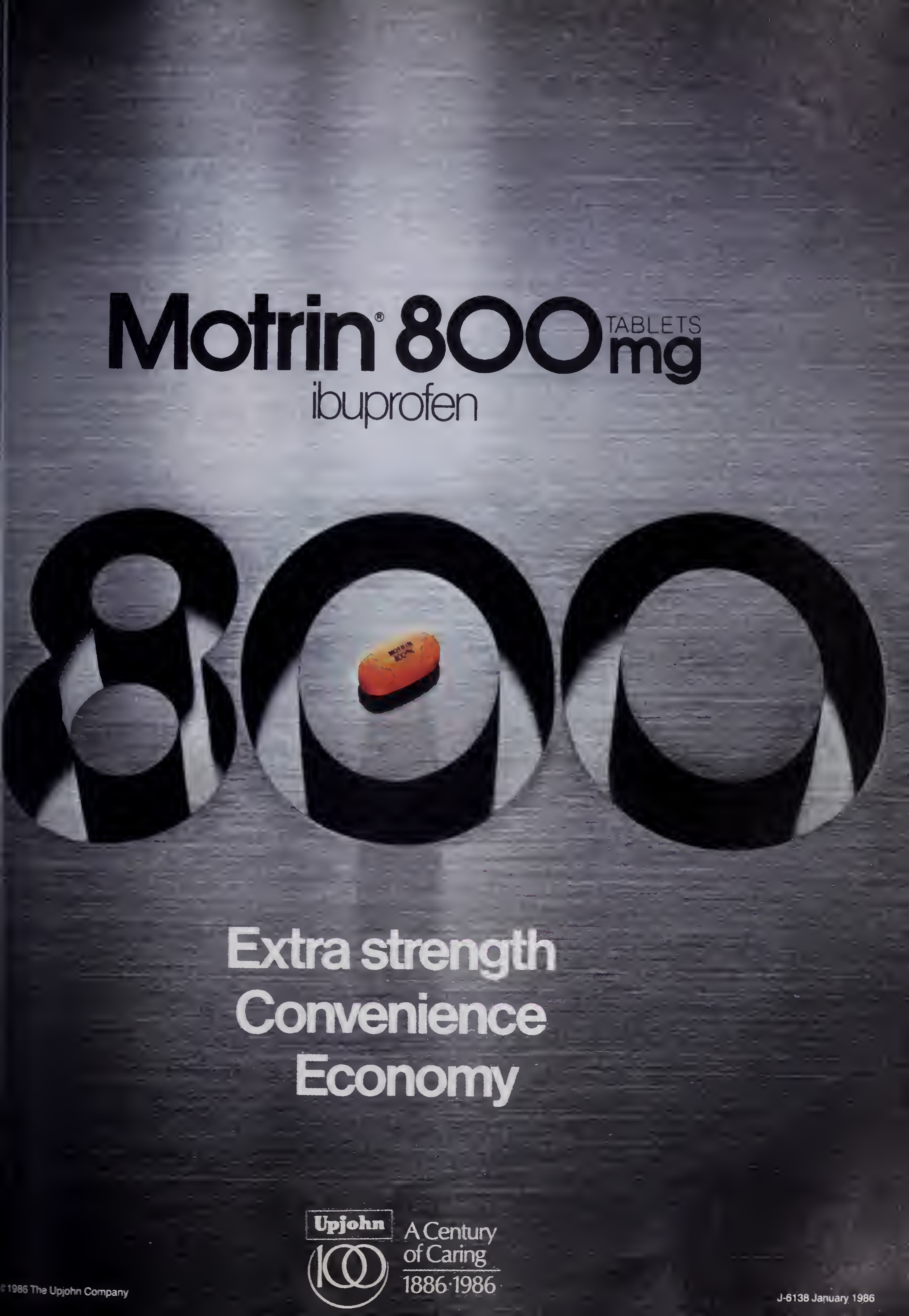

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J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake **Associated widened ORS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of Dyrenium (triamterene, SK&F CO.) and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth, anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions, nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamtorene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (Intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.
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Your Assurance of
SK&F Quality

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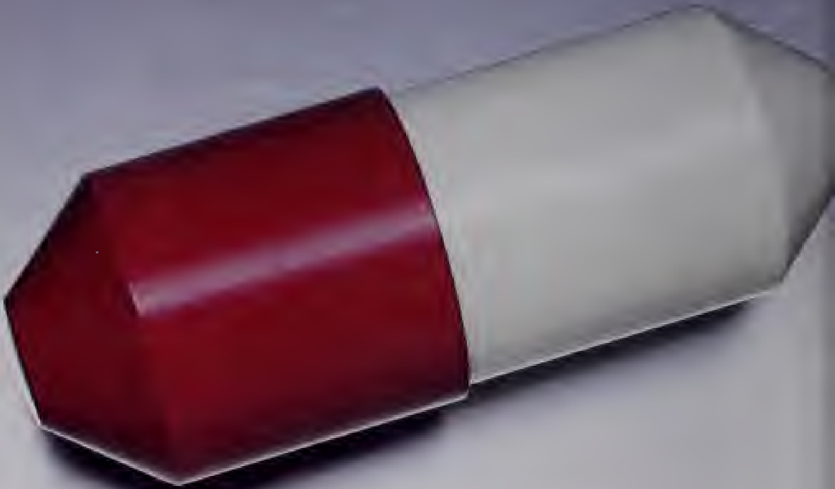

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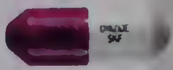

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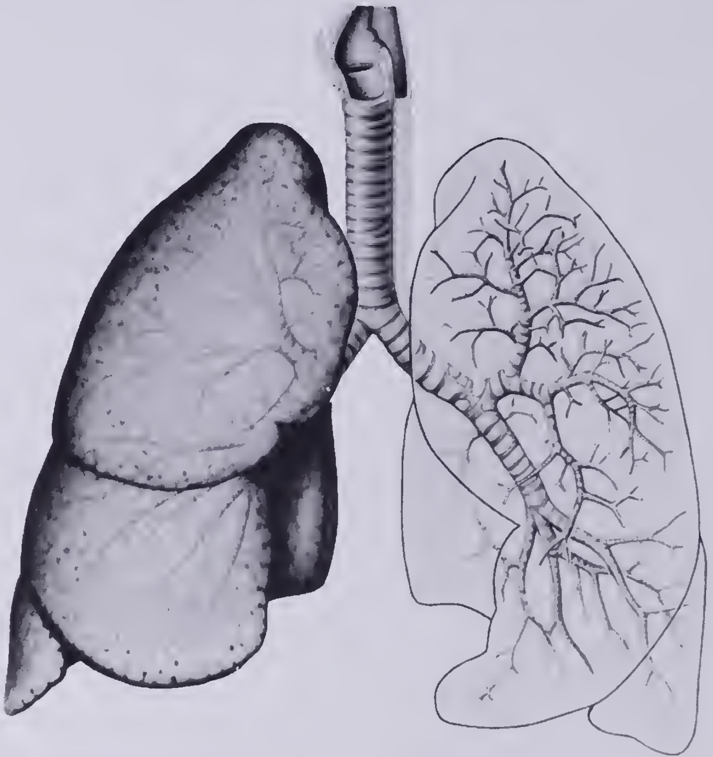
Consider the causative organisms...



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H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
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Brief Summary Consult the package literature for prescribing information

Indications and Usage Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae* and *S pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life threatening

Treatment with broad spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic associated pseudomembranous colitis produced by *C difficile* Other causes of colitis should be ruled out

Precautions *General Precautions* – If an allergic reaction to Ceclor® (cefaclor, Lilly) occurs, the drug should be discontinued, and if necessary the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor a false positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes Tape® (Glucose Enzymatic Test Strip USP, Lilly)

Broad spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease particularly colitis

Usage in Pregnancy – Pregnancy Category B – Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor® (cefaclor Lilly) There are however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers – Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18 0 20, 0 21 and 0 16 mcg/ml at two three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children – Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbilliform eruptions (1 in 100) Pruritus urticaria and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum sickness like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain – Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic – Slight elevations in SGOT SGPT or alkaline phosphatase values (1 in 40)

Hematopoietic – Transient fluctuations in leukocyte count predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal – Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

(061782R)

Note Ceclor® (cefaclor Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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Harrison L. Rogers, Jr., M.D.

President of the American Medical Association

Harrison L. Rogers, Jr., M.D., a general surgeon from Atlanta, GA, will be the speaker at the 1986 Inaugural Banquet at 7:30 p.m. on Sunday, April 27. The Banquet will be held in the Grand Ballroom at the Omaha Marriott.

His speech topic will be "Future Directions of Health Care".

Dr. Rogers brings a rich background of medical and medical association experience to his position. His direction is helping organized medicine move confidently through this period of change and transition.

You will want to share the experience of his presentation with your colleagues. Be sure to reserve the date now.

AMA News Notes

Having Failed to reach agreement on a federal budget proposal, Congress recessed until Jan. 21. Emergency action taken on Dec. 23, however, extended the Medicare reimbursement freeze until March 14, and the 16-cents-a-pack cigaret tax until March 15. For both, it was the fourth extension by Congress; the two measures were originally scheduled to expire on Sept. 30. A few days before adjournment, House and Senate conferees had endorsed a measure that would have made more than 60 major changes in Medicare and would have cut the program by $11 billion over the next three years. Among approved changes were actions to: raise the fee allowances of Medicare participating physicians in calendar 1986 by the scheduled amount plus 1%; continue the current freeze on actual charges and prevailing fees for non-participating physicians; update formerly participating physicians' customary charge profiles; and establish an independent physician reimbursement advisory group.

(Continued on page 8A)

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AMA News Notes

(Continued from page 7A)

The measure would have rescinded two Reagan Administration regulations that would freeze Medicare hospital rates and payments for direct graduate medical education costs in fiscal 1986. The conferees instead agreed to raise both rates and payments for direct graduate costs by 1% in 1986, but to limit payments for direct graduate training costs to a maximum of five years. Further, the current 11.59% Medicare rate adjustment for indirect training costs would have been reduced to about 8%.

The legislators might bring up the reconciliation measure after they reconvene on Jan. 21, but this was considered unlikely. If they fail to act, automatic budget cuts in legislation sponsored by Sens. Phil Gramm (R, Texas), Warren Rudman (R, N.H.), and Ernest Holling (D, S.C.), would take effect. It would apply cuts of up to 1% in 1986 and 2% in future years to Medicare payments to physicians, hospitals, and other providers.

ADVICE TO AUTHORS

Manuscripts should be submitted in duplicate to the Editor at the following address: Alan D. Forker, M.D., 5505 Ellendale Road, Lincoln, Nebraska 68510. The manuscript should be typewritten, double-spaced, on 8½ x 11 in. paper, with generous margins on each page. Number all pages in the right upper corner with the author's surname.

Review articles will be considered, and should generally be limited to less than 4,000 words and approximately 30 references.

Manuscripts describing original clinical or laboratory research should be limited to 2,000 words and approximately 20 references.

Acknowledgements must be given when material from other publications is included. Provide names of authors, title of article, title of journal or book, volume number, pages, month and year, and publisher's permission to reprint.

Always send a covering letter or letter of transmittal with each manuscript, and refer to the manuscript by its title, in the letter and all correspondence. Do not send a manuscript that was published elsewhere.

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Summary for article: all major scientific articles should be accompanied by a summary at the end of the article, summarizing the key information and recommendations presented.

References: should be listed in the order in which they appear in the article and should be typed double-spaced. Authors are responsible for the completeness and accuracy of all cited references. Journal references should include authors' names and initials, title of article, abbreviated name of Journal (as listed in Index Medicus), volume number, inclusive pages, and year of publication. References to books should include authors, title, location and name of publisher, year of publication, edition, and page numbers.

Tables and illustrations: should be typed double-spaced on separate sheets of 8½ x 11 in. paper. Each Table should have a title. Illustrations should be prepared professionally and submitted as high-quality, glossy, unmounted black-and-white photographic prints, at least 5 x 7 in. Do not send original artwork. Each illustration should be consecutively numbered and cited in the text. Each photograph should have a gummed label on the back containing the figure number, name of senior author and an arrow indicating top of figure. Legends should be typed double-space for each illustration. Permission to reproduce a picture of a patient is needed, if such a picture is included.

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AMA News Notes

The Most Significant change that should concern the medical profession today is the attitude of physicians toward the future of the profession, AMA President Harrison L. Rogers Jr., M.D., told the Association's House of Delegates. Speaking during the AMA Interim Meeting in Washington, D.C., Dr. Rogers warned that the problem is apparent in physicians who say, among other complaints, that they are losing their close relationship with patients; that it will not be possible to continue to practice in view of the professional liability crisis; that the for-profit status of hospitals will destroy patient care; and that they would never advise their children to become physicians.

'I would be satisfied with my tenure as your president if it could counter those negative attitudes, which, in my mind, are more dangerous to the future of the medical profession than anything that is being imposed

(Continued on page 10A)

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AMA News Notes

(Continued from page 9A)

or anything that can be imposed on us in the future from outside.'

The AMA president predicted that new physicians in the 1980s and 1990s would deliver health care that would make the care he offered when he began practice in 1957 'pale by comparison'. He also noted the dramatic changes in reimbursement mechanisms, but emphasized that such changes 'will not in the slightest affect the quality of care given by us to our individual patients — if we truly remain our patients' advocate; if we remain their compassionate, concerned, dedicated physicians.'

* * *

Physicians' Public Image has stopped declining and appears to be on the upswing, Larry J. Freshnock, PhD, director, AMA Survey and Opinion Research, reported at the Association's National Communications Workshop. The 1985 annual survey of the public's attitudes toward physicians found a five-point

(Continued on page 16A)

Jerald R. Schenken, M.D.

"IS THERE A MEDICARE IN OUR FUTURE?"

Hear Jerald R. Schenken, M.D., address this topic at the NMA Annual Session Breakfast Meeting, Sunday, April 27, 1986, 8:00 a.m. at the Omaha Marriott Hotel.

Doctor Schenken is a member of the AMA Board of Trustees and will be bringing us the latest information on Medicare.

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THE NEBRASKA MEDICAL JOURNAL

Can Systemic Hemophilus Influenza — Type B Infections Be Prevented in Children?

KENTON L. SHAFFER, M.D., F.A.A.P.
Kearney Clinic, 211 West 33rd Street, Kearney, Nebraska 68847

INFECTIONS due to Hemophilus influenzae type B (HIB) are a major cause of morbidity and mortality in children. The national statistics reveal that the attack rate of systemic HIB at some time during the first five years of life is about 1 in 200 children for some form of systemic disease, be it meningitis, epiglottitis, arthritis, cellulitis, septicemia or pneumonia. The attack rate is 1 in 350 for meningitis. The attack rate peaks at approximately six months to one year of age and declines thereafter.

An article by Zach and Tonniges in this current issue discusses the occurrence of systemic hemophilus infections in central Nebraska. They found, by using the recently available polysaccharide capsular hemophilus influenza type B Vaccine, that approximately 30% of the systemic infections would be prevented by using this vaccine at two years of age, and that approximately 20% of the cases of meningitis would be prevented. These findings are very similar to the national statistics.

The current recommendation for use of the HIB Vaccine, as recently published in the MMWR (volume 34, no. 15, 1985), recommends that this vaccine be administered to all children at 24 months of age. Children between the age of two and five should be considered for vaccination, although the risk of invasive HIB disease decreases with increasing age. At present, the precise duration of immunity conferred by a single dose of the HIB Vaccine at 24 months of age is not known exactly, but the protection is expected to last 1½ to 3½ years and no routine re-vaccination is recommended for this age group. Immunization of children at 18 months of age, especially those noted to be in a high risk group, should be considered. This would include children in daycare centers under 5 years of age, American Indians and Eskimos, and those conditions associated with anatomic or functional asplenia such as sickle cell disease or splenectomy, and malignancies associated with immunosuppression. These children immunized at 18 months of age may require a second dose of vaccination to insure adequate protection, but the exact timing of this dose is not known at this time. The vaccine is not recommended for children under 18 months of age. Simultaneous administration of the HIB Vaccine and the DPT Vaccine at separate sites can be performed.

Data from the initial use of the vaccine in Finland revealed that the vaccine is safe with an incidence of side effects of only 1 to 2 percent, mainly fever, and tenderness at the site of infection. If used in children over 18 months of age, the vaccine prevents 90 percent of the invasive Hemopilus influenza type B infections. Whether the data from the Finnish studies is applicable over the United States remains to be proven.

Systemic Hemophilus influenza type B infections are an increasing problem in pediatrics the last decade. The current polysaccharide capsular HIB Vaccine is obviously not as effective in children as we would like. Children under 18 months are especially in need of protection and research in developing a new vaccine is underway; hopefully, this will be the answer to preventing this type of disease.

With the data currently available, I would certainly feel that we should use the current HIB Vaccine in our children while awaiting development of a new vaccine.

Systemic Hemophilus Influenza Infections In Central Nebraska - How Useful Will The New Vaccine Be?

TERENCE L. ZACH, M.D.*
Department of Pediatrics, University of Nebraska Medical Center

THOMAS F. TONNIGES, M.D.
Mary Lanning Hospital of Hastings, Nebraska

HEMOPHILUS influenza type B (**HIB**) is the leading cause of bacterial meningitis in the United States. The vast majority of cases occur in children, usually under 5 years of age. **HIB** can cause a variety of other serious systemic infections in children including epiglottitis, cellulitis, septicemia, septic arthritis and pneumonia.[1] In April 1985 the Food and Drug Administration approved licensure of **HIB** capsular vaccine for routine use in children from 2 to 5 years of age. We reviewed the cases of serious **HIB** disease in the tri-city region of central Nebraska over the last five years to determine the potential impact of mass immunization at 2 years of age.

Methods

All medical charts from Hastings Mary Lanning, Kearney Good Samaritan, Grand Island Memorial and Grand Island St. Francis Hospitals with discharge diagnoses of meningitis, epiglottitis, septic arthritis, cellulitis, pneumonia, or sepsis caused by **HIB** were reviewed. Charts were pulled from a 5 year time span from 1980 through 1984. Epidemiologic, bacteriologic and clinical outcome were examined. Finally, the total hospital bill of all patients greater than 2 years of age was requested. Meningitis cases were considered if there was a positive CSF culture or CSF latex agglutination. Epiglottitis patients were required to have positive blood or epiglottic cultures plus either direct visualization of a swollen epiglottitis or abnormal lateral neck radiographs. Septic arthritis patients were only considered if there was a positive joint aspirate or positive blood culture in the clinical setting of an inflammed joint. Likewise, cellulitis required either positive blood culture or a culture of the leading edge of the inflammation. Sepsis was defined as positive blood culture with negative CSF culture and a normal chest x-ray. Pneumonia was defined as a positive chest x-ray plus positive blood cultures.

Results

There were 78 cases of serious **HIB** infections hospitalized in the tri-city hospitals from 1980 through 1984. Of the 78 cases, there were 52 cases of meningitis (67%), 13 of epiglottitis (17%), 6 of periorbital or orbital cellulitis (8%), 4 pneumonia (5%) and 1 each of buccal cellulitis, hand cellulitis, and sepsis (1% each). No case of septic arthritis due to **HIB** was identified (Table I). Local pediatricians confirmed this. There was a slight male predominance (Table II). Consistent with the local population base, there were only 1 black, 1 Hispanic, and 2 American Indian patients.

There were no secondary cases in siblings. There was one patient who had two bouts of meningitis two months apart. She was thought to have an underlying splenic dysfunction. There were three deaths, all due to meningitis, for a case-fatality rate of 6% (3/52).

There were 15 cases of two infections in the same patient (19%). Most were cases of pneumonia in association with meningitis or epiglottitis. There was one case of periorbital cellulitis/meningitis and another with buccal cellulitis/meningitis. Sixteen of the 78 isolates were amipicillin resistant presumably by Beta lactamase production. No chloramphenicol resistant isolates were identified. The peak incidence of **HIB** infections was at approximately 6-8 months age. However, 25/78 (32%)

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*Reprint Request Terence Zach, M.D., Department of Pediatrics, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105.

were greater than 24 months (Figure 1). Eleven of 52 meningitis patients (21%) and 11/13 (85%) of epiglottitis patients were older than 2 years. The age range was from a two day old with pneumonia and sepsis to a 51 month old with epiglottitis. Interestingly, the two youngest patients were both American Indians.

The total hospital bill was obtained from 23 of the 25 patients over 2 years of age. The sum of the total bills was $87,433 with an average bill of $3,801.

TABLE I

Meningitis	52	(67%)
Epiglottitis	13	(17%)
Cellulitis	8	(10%)
Pneumonia	4	(5%)
Sepsis	1	(1%)
Septic arthritis	0	(0%)
Total	78	(100%)

Discussion

There are approximately 20,000 cases of serious **HIB** infection per year in the United States. Approximately 12,000 of these are meningitis. Sixty seven percent of our patients had meningitis which closely follows the national average[1,2] (Table I). The case-fatality rate of **HIB** meningitis in central Nebraska was 6% which is comparable to that reported by others.[1] It has been said that some form of invasive **HIB** infection will strike one in every 200 children by the time they reach age five.[2] Because of these frightening numbers, a major effort was initiated by the National Institute of Allergy and Infectious Disease to develop a **HIB** vaccine.[3] The capsular polysaccharide vaccine currently on the market initially was clinically tried in Finland in 1974.[4] This study and others subsequently have found that the vaccine is highly effective in inducing antibody response to the capsule **HIB** in children over age 2 years. In children less than 18 months of age, the immunogenicity is quite poor.[5] Between 18 months and 2 years, there is a variable response; therefore it is only recommended for high risk patients at that time with a second dose of vaccine to be given within 18 months after the initial dose to ensure adequate protection. A protein conjugated vaccine is currently being tested in clinical trials; preliminary studies report that it may be useful in children as young as 7 months of age.[6,7] We found that 32% of systemic invasive **HIB** disease in central Nebraska from 1980 through 1984 occurred in children over 2 years of age. Twenty one percent of patients with meningitis and 85% of patients with epiglottitis were older than 2 (Figure 1). Dajani found 30% of meningitis patients and 76% of epiglottitis patients were over age 2 years.[1] Other epidemiologic studies have found similar results.[8,9] Conceivably all of these cases could have been prevented with mass use of the vaccine.

Another important finding was that 20% of isolates were Ampicillin resistant. This is quite a bit less than that reported by Shaffer et al in that area from 1976 to 1979.[10] The reason for this is unknown but the 20% figure is close to that found currently in Omaha hospitals and

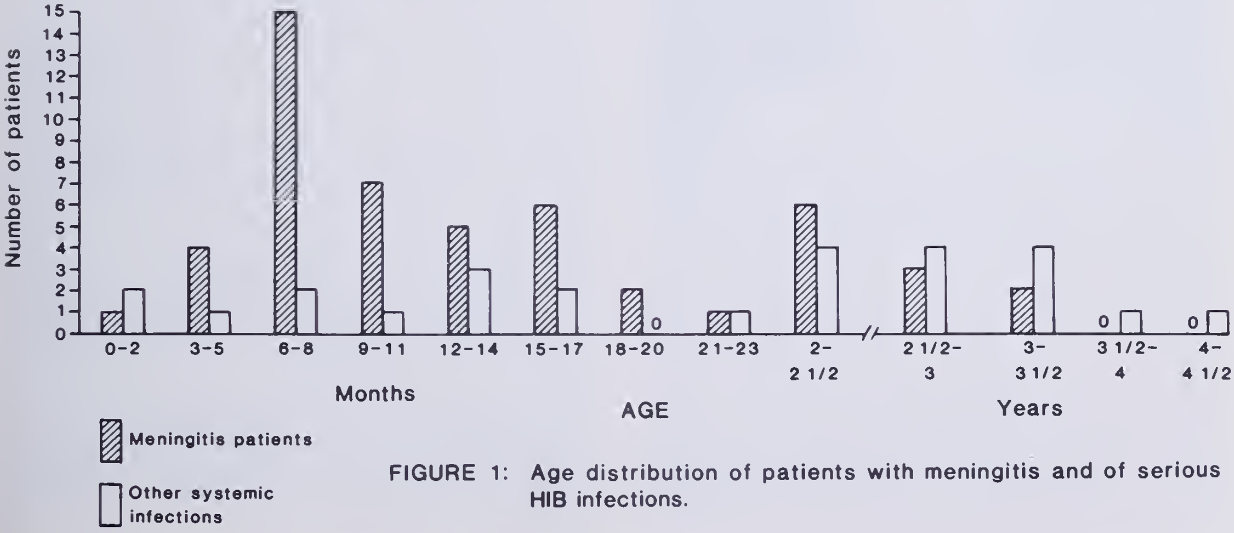

FIGURE 1: Age distribution of patients with meningitis and of serious HIB infections.

nationwide. Fortunately, no chloramphenicol resistant strains were isolated although **HIB** with the chloramphenicol inactivating enzyme chloramphenicol acetyltransferase have been reported in the state and region.[11,12]

The slight male predominance in **HIB** disease has been noted in the past[1] and was also found in our study (Table II). The Caucasian predominance in our study is consistent with the patient population served. It is well documented that American Indians are at a much higher risk of invasive **HIB** disease,[13] and it is interesting that the two youngest patients in our series were the only two American Indians. Certainly they would have been too young to have been protected by the new vaccine. However, it should remind us to include American Indians in our high risk group to be immunized at 18 months. Likewise the only case of recurrent infection occurred in a patient with a probable underlying splenic dysfunction. Anatomically or functionally asplenic patients, such as splenectomized or sickle cell patients, are also considered part of the high risk group to be immunized at 18 months.[14]

Finally, an exhaustive cost effectiveness analysis was not done; however, the total hospital bill of 23 of the possible preventable patients was sizeable. Cochi has theorized that the vaccine will be cost effective,[2] but Ward has pointed out some errors in his methodology.[15]

TABLE II

	Male		Female	
Meningitis	27	(52%)	25	(48%)
Epiglottitis	8	(61%)	5	(39%)
Other	8		10	
Total	43	55%	35	(45%)

Conclusion

Based on a retrospective chart review of serious **HIB** infections in 4 hospitals in the tri-city area of central Nebraska, it appears that approximately 30% of the infections could have been prevented by the new capsular vaccine. Only 20% of the patients with meningitis would have been preventable, but 85% of the epiglottitis occurred after age 2 years. With the increasing incidence of antibiotic resistant **HIB** and the significant morbidity and mortality associated with the disease, it appears that the new vaccine will be a useful addition to the pediatrician's and family practitioner's armamentarium of preventative medicine. However, it should be realized that the present vaccine will not totally eliminate meningitis in children. Hopefully the newer protein conjugated vaccines will provide earlier coverage.

Acknowledgement

We would like to thank the local medical records departments and pediatricians for their cooperation. We appreciate the secretarial assistance of Donna Rold.

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Primary Pulmonary Sporotrichosis Occurring in Two Meat Packers

NARESH DEWAN, M.D.*
Assistant Professor of Medicine

SUKHDARSHAN BEDI, M.D.
Pulmonary Fellow

WALTER J. O'DONOHUE, JR., M.D.
Professor of Medicine

From the Pulmonary/Allergy Division
of the Department of Medicine
Creighton University School of Medicine
Omaha, Nebraska

PRIMARY pulmonary sporotrichosis is a relatively uncommon fibrocavitary disease which closely resembles tuberculosis on the chest x-ray film.[1] The disease is produced by **Sporothrix schenckii**, a fungus commonly present in nature as a saphrophyte. Gardeners, rosebush workers, and persons working with peat moss are at increased risk for both cutaneous and systemic infections.

We present two cases of pulmonary sporotrichosis in meat packers, who worked for the same employer. To the best of our knowledge sporotrichosis has not been previously associated with the meat packing industry.

Case Reports

Patient 1

A 57-year-old white male, who had been working in a meat packing plant for 13 years, presented with a spontaneous pneumothorax. Following reexpansion of the lung, the chest x-ray film revealed extensive cavitary disease of both upper lobes with an air-fluid level in the left apex (Figure 1). Five months before admission he had developed a productive cough with fever, myalgias, and night sweats. He drank one pint of liquor each day and had smoked 1 pack of cigarettes per day for 40 years. He denied any history of gardening or exposure to peat moss or rosebushes. Numerous sputum smears and cultures failed to reveal acid-fast organisms. The patient was discharged and was readmitted six months later because of persistence of symptoms and failure of the chest x-ray film to improve despite therapy with several anti-microbial agents.

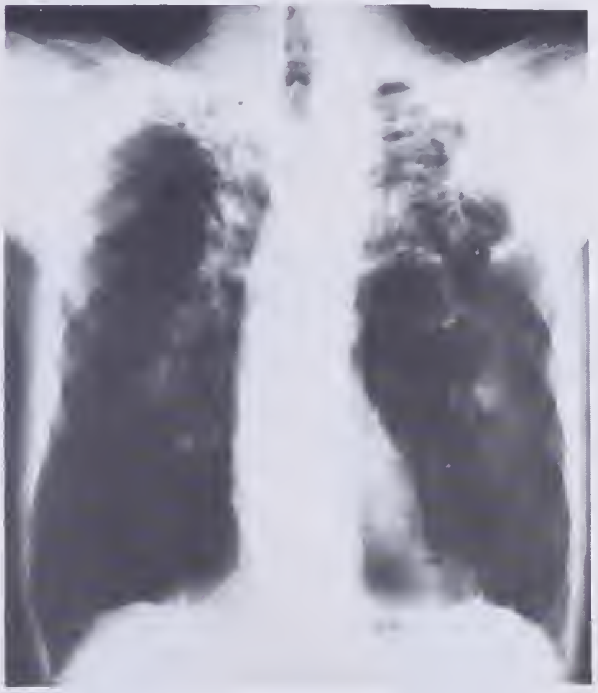

Figure 1
Chest x-ray film at time of admission, showing extensive bilateral fibrocavitary disease (Case 1).

Physical examination at the time of readmission disclosed the patient to be pale, well-developed, well-nourished and in no distress. He was afebrile with normal vital signs. There was no lymphadenopathy and no skin lesions were noted. Egophony, rales and rhonchi were present over both upper lobes. The liver was smooth and nontender with a total span of 12 cm.

The hematocrit was 34.5% and the WBC count was 6,800/cu mm with a normal differen-

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*Reprint requests: Naresh A. Dewan, M.D., Pulmonary/Allergy Division, Creighton University School of Medicine, 601 North 30th Street, Omaha, NE 68131 tial. Serum electrolytes and liver function studies were within normal limits. The BUN was 52 mg/dl and the serum creatinine was 2.8 mg/dl. Transbronchial lung biopsies of the left apical posterior segment revealed focal areas of inflammation. Gomori-methenamine silver stain of the tissue disclosed a few yeast-like organisms. Bronchial washings and sputum cultures subsequently grew **Sporothrix schenckii.** The Complement Fixation Test for sporotrichosis was positive in a dilution of 1:2560. Intravenous Amphotericin B was begun and a total dose of 3.5 gm was given. Significant clinical improvement was noted in two months. Chest x-ray films demonstrated clearing of the infiltrate with residual fibrocystic disease.

Patient 2

A 52-year-old white man, who worked in a meat packing plant, complained of shortness of breath for three years prior to hospitalization. Three weeks before admission he noted blood-streaked sputum and fever. He had experienced a weight loss of approximately 12 pounds over four weeks. A chest x-ray film disclosed pleural thickening and apical cavitary infiltrate with volume loss of the left upper lobe (Figure 2).

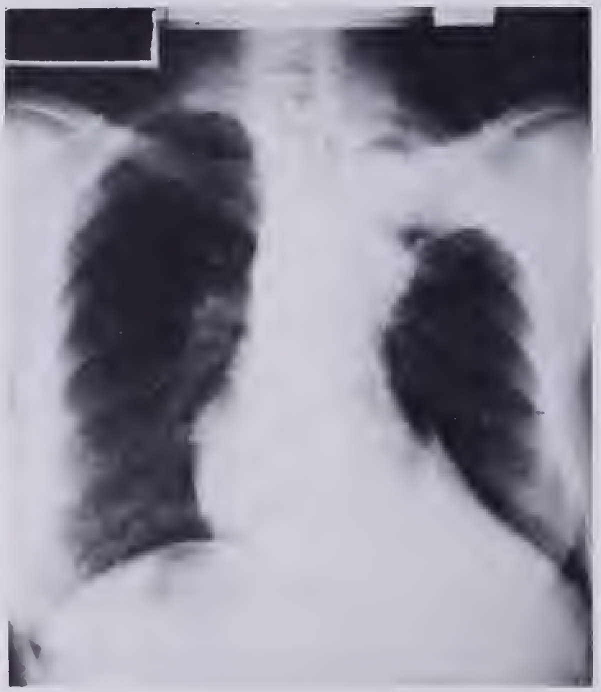

Figure 2
Chest x-ray film at time of admission showing apical cavitary infiltrate with volume loss of the left upper lobe (Case 2).

Physical examination on admission revealed a chronically ill appearing man. The temperature was 100.6 F, pulse 96 beats per minute and blood pressure 140/90 mm Hg. There was no evidence of lymphadenopathy and no skin lesions were present. Examination of the chest revealed rales over the left upper and middle lung fields. The remainder of the physical examination was unremarkable.

The white blood cell count was 5,400/cu mm and the hemoglobin level was 12 gm/dl. Metabolic profile and liver function studies were within normal limits. Several sputum smears and cultures were negative for acid fast organisms but six sputum cultures obtained over a period of one month were positive for **Sporothrix schenckii.** The patient received oral iodide for five weeks and because of failure of the chest x-ray film to improve, intravenous Amphotericin B was begun. A total of 1.6 gm of Amphotericin B was administered. A repeat chest x-ray film showed improvement and sputum cultures were negative after completion of the therapy.

Discussion

Sporothrix schenckii is distributed widely in nature. Sporadic cases may be seen in persons exposed to soil, timber, peat moss, or rosebushes. Lymphocutaneous involvement is by far the most common manifestation of disease and extracutaneous sporotrichosis is rare. Pulmonary sporotrichosis is uncommon but has been reported on several previous occasions.[1-5] The majority of the cases occur in men between the ages of 30 and 60 years. About 40 percent of the patients have been alleged to be alcoholics or heavy users of alcohol.[4]

Sporothrix schenckii is a dimorphic fungus with spores of 3 to 5 U. These spores are probably inhaled to produce primary pulmonary sporotrichosis.[2,6] The presenting symptoms are usually cough with sputum production, low grade fever, chest pain, malaise, night sweats and weight loss. Chest x-ray abnormalities are predominantly in the upper lobes with unilateral or bilateral apical infiltrates and fibronodular densities which often progress to cavitation. Pneumothorax and bronchopleural fistulae may also occur. Hilar adenopathy and pleural effusions are rare.[5]

The incidence of systemic infection appears to be increasing, primarily in the immunocompromised hosts.[7] The source of infection for pulmonary and other forms of extracutaneous sporotrichosis is unknown but is presumed to be contaminated vegetation. In recent years an increasing number of patients with pulmonary sporotrichosis have had no history of exposure to known sources of cutaneous infection.[2,3,8]

The two patients described in this report had no history of exposure to substances which are known to predispose them to infection and they were not immunocompromised. Both patients were middle aged men who worked in the same meat packing plant, and one of them had a history of alcoholism. Meat packers have not been reported to be at increased risk for developing sporotrichosis. It is speculated that they may have been exposed to the same source of infection in the plant. The development of pulmonary sporotrichosis in the two meat packers serves as a reminder of our limited knowledge of the sources and causes of systemic infection with **S. schenckii.**

Summary

Primary pulmonary sporotrichosis is a rare disease presumably caused by inhalation of spores of **sporothrix schenkii**. We described two cases of pulmonary sporotrichosis in meat packers who worked in the same meat packing plant. Both patients had clinical remission of disease after treatment with amphotericin B.

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Leukocytosis Following Intravenous Phenylpropanolamine Use — Possible Association

PAUL M. PAULMAN
Assistant Professor, Family Practice Department

JAMES COMMERS, M.D.
Clinical Assistant Professor, Internal Medicine Department

DONALD L. GOODE, PHARM. D.
Assistant Professor, College of Pharmacy, University of Nebraska Medical Center, 42nd & Dewey, Omaha, Nebraska 68105

AMONG the side effects of illicit intravenous drug abuse are a variety of systemic infections, including bacterial pneumonia, infectious endocarditis and septic thrombophlebitis. Peripheral neutrophilic leukocytosis is often utilized as a marker for the presence of such infections in individuals at risk. Reported here is the case of a patient who presented with marked leukocytosis in the absence of infection following the illicit use of intravenous phenylpropanolamine.

Case Report

A 24 year old female presented to the emergency department with complaints of "feeling jumpy" and mid epigastric pain occurring twelve to fourteen hours after IV use of approximately 250 mg. of what she thought was "crank" (methamphetamine). Her past history was positive for IV drug use and she had a positive family history of chemical dependence. Examination revealed an agitated woman with vital signs of temperature 96.4 degrees F, pulse 124/min, respirations 20, blood pressure 88/58 mmHg. The patient was oriented, had no tremor and no pupillary dilatation. Her lungs were clear. The cardiac exam was negative except for a regular tachycardia. There was no evidence of peripheral thrombophlebitis and no skin lesions were found. A preliminary diagnosis of amphetamine intoxication was made, and the patient was admitted.

Initial laboratory values revealed the white blood count to be 52,000 units/mm.^{3} The differential count included 59% segs and 39% bands. The hemoglobin was 14 grams %, hematocrit 40%, reticulocyte count 1.1%, and the platelet count 292,000 units/mm.^{3} Review of the peripheal smear demonstrated mild toxic granulation and occasional Dohle bodies within segmented and band forms. Occasional basophilic stippled red cells were seen as were rare Howell-Jolly bodies. The red blood cells were normochromic and normocytic.

Serum electrolytes, acid-base studies and renal function were normal. The total serum protein was 5.9 gm/dl with albumin 3.7 gm/dl. The lactate dehydrogenase was grossly elevated to 2,060 units and the SGOT was 331 units. The alkaline phosphatase was 74 units and total bilirubin was 0.8 mg/dl. The urinalysis demonstrated 2+ proteinuria and 2+ bacteruria. A chest x-ray demonstrated minimal bi-basilar infiltrates. Because of the marked leukocytosis, urine and blood cultures were obtained and broad-spectrum IV antibiotics were begun. After 48 hours, antibiotics were discontinued when culture results were negative.

Over the first few days of hospitalization, the peripheral leukocytosis gradually resolved as shown on top of page 41.

The neutrophil alkaline phosphatase drawn on the second day of hospitalization was 210 (normal 15-118). The presence of Howell-Jolly bodies prompted a liver-spleen scan which demonstrated a normally functioning spleen of normal size. M-mode and sector echocardiography showed no cardiac valvular vegetations. The initially elevated enzymes rapidly returned to normal during hospitalization. A toxicology screen demonstrated the presence of phenylpropanolamine, caffeine and an unidentified amine (neither D or methamphetamine). The patient remained afebrile during her

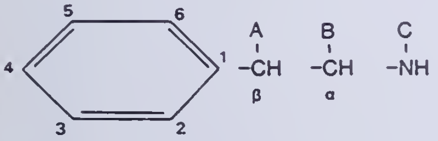
	WBC	Bands	Segs	Lymphs	Monos	Eos	Basos	Other
Day 1	52,000	36	58	2	4	0	0	0
Day 2	32,800	13	70	13	3	1	0	0
Day 3	27,200	3	79	15	3	0	0	0
Day 5	21,800	6	60	25	5	2	0	2

hospitalization with no evidence of infection. She was discharged to outpatient follow-up and arrangements were made for inpatient chemical dependency treatment. However, she failed to return for therapy.

Discussion

Phenylpropanolamine is a synthetic sympathomimetic drug which is structurally related to ephedrine and amphetamine (See Fig 1). It is commonly included in cough and cold preparations and sometimes sold on the street as "speed" or amphetamines. Phenylpropanolamine does have some clinical effects which are similar to the amphetamines (i.e. anorexia, tremor, restlessness) but these effects are much weaker than those of amphetamines.[2] These differences are primarily related to the -OH group substituted on the beta carbon of the parent compound, phenylethylamine (See Fig 1). Leukocytosis has been associated with amphetamine usage via a mechanism suggested to be similar to that which causes "stress leukocytosis." [1] Phenylpropanolamine has not been reported to cause leukocytosis but it's structural similarity to amphetamine, the known neutrophilic effects of other amines, and the time course of the leukocytosis in this patient make phenylpropanolamine likely cause of this patient's leukocytosis.[3] The presence of the other unidentified amine (neither D or methamphetamine) makes this compound a possible mediator of the leukocytosis because it is an amine with a structure similar to that of amphetamine. In IV drug abusers, leukocytosis is not always a reflection of underlying infection.

FIGURE I



NAME	RING	A	B	C
phenylpropranolamine	—	-OH	-CH3	-H
amphetamine	—	-H	-CH3	-H
ephedrine	—	-OH	-CH3	-CH3
epinephrine	3-OH 4-OH	-OH	-H	-CH3

Structural Relationships of Related Sympathomimetic Compounds

Summary

This patient presented an interesting clinical problem. While thought initially to have amphetamine intoxication, phenylpropanolamine was probably the cause of this patients signs, symptoms and laboratory findings. Further study is necessary to determine whether phenylpropanolamine can cause leukocytosis.

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FRACTURE OF THE MONTH

Central Fracture-Dislocation of the Hip with Sciatic Nerve Injury

JOHN F. CONNOLLY, M.D.
JOSEPH YAO, M.D.
From the Department of Orthopaedic Surgery and Rehabilitation, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, NE 68105

A 23-year-old man was brought to our emergency room after an automobile accident on an icy road. He complained of both jaw and right hip pain and on physical examination had a flexed abducted right leg with obvious shortening. Any attempted motion of the leg caused pain in the right hip. In addition, the patient was unable to extend his right foot and ankle actively. Roentgenograms showed a fracture of the mandible and maxilla, as well as a comminuted fracture of the acetabulum with central protrusion of the femoral head (Fig. 1). An intravenous pyelogram and retrograde cystourethrogram, as well as other diagnostic tests, showed no other injuries. The purpose of this presentation is to discuss the treatment of these severe combined injuries.

Discussion

Fractures of the acetabulum are generally divided into those involving the inner central wall, the posterior wall and the superior weight-bearing dome.[1] The superior dome comprises the main weight-bearing area of the joint while the posterior wall maintains stability. These two areas both have relatively thick bone and require a large force for fracture. In contrast, the central acetabular wall is relatively thin and can fracture as a result of much less force. The key consideration in determining treatment is how much the fracture will affect the future weight-bearing function of the joint. For the most common fractures of the central acetabulum without inward displacement of the femoral head, symptomatic treatment with one to two weeks of traction and crutch-protected walking for six weeks usually suffices. For fractures of such severity involving both the central and superior weight-bearing dome, as in the present patient, prompt reduction of the joint surface is critical. Operative intervention may sometimes be needed to fix large fracture fragments, but surgical invasion of the wound does carry more than an ordinary risk of infection and ectopic soft tissue calcification. Therefore, an attempt should be made to reduce these displaced dislocations by closed methods. This can be done using traction directed along the appropriate force vectors. Adequate anesthetic is essential to relax the muscles. A lateral femoral pull is necessary then to disengage the femoral head and acetabular fracture fragments. Distal femoral traction is needed to prevent redisplacement of the hip. This reduction must be done promptly before fibrosis of the clot around the fracture makes reduction difficult.[1,2,3]

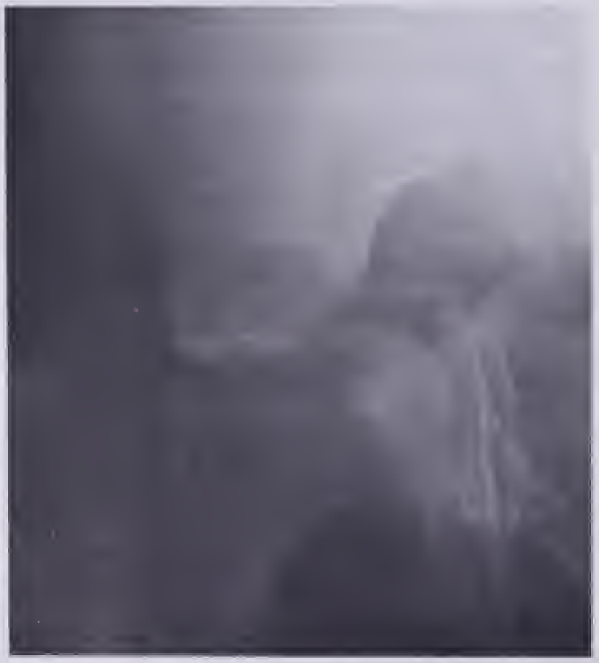
Figure 1 - X-ray of the original injury shows a comminuted acetabular fracture with protrusion of the femoral head.

If the hip can be reduced by closed methods, sciatic nerve injury is usually not an indication for operation. Most sciatic injuries are of the neuropraxic (stretch) type for which surgical decompression is ineffective. The fact that this is an incomplete or neuropraxic lesion is usually evident if the deficit only involves the peroneal component of the nerve which is fixed by the fibular neck. The more freely mobile tibial component is rarely injured by a stretch mechanism. Consequently, paralysis of both tibial and peroneal components of the sciatic nerve would indicate a more significant disruption. If the hamstring muscles, as well as the ankle dorsiflexor were involved, operative exploration of the nerve might be indicated.

Management

Under general anesthetic the fractures of the patient's jaw were wired. The hip fracture-dislocation was reduced by placing the patient on the uninvolved side and applying a pillow between the thighs while the injured hip was adducted. Lateral traction was then applied using a heavy traction-screw placed in the subtrochanteric region of the femur. A clunk was felt as the protruded femoral head reduced to its normal position beneath the acetabular dome (Fig. 2). Skeletal traction was also applied to the distal femur with a pin inserted in the supracondylar region. The patient was then placed postoperatively in balanced suspension with 7 kg. traction on both the lateral and the distal femoral pins. The foot was supported with a foot brace while the patient was kept in traction. At six weeks, roentgenograms showed some healing and maintenance of the acetabular fracture reduction and at that time the lateral femoral traction pin was removed. The traction was modified to allow active and passive abduction exercises of the right hip, while maintaining continuous traction to the distal femoral traction pin. At nine weeks traction was discontinued when roentgenograms showed no central displacement of the femoral head. The patient was then allowed to walk without putting weight on the injured leg. He was also continued on skateboard abduction exercise to encourage maintenance of full motion in the hip joint. At four months he was allowed to bear partial weight on the injured side and at six months was fully weight-bearing. On followup at twelve months after injury the patient had no hip pain and had essentially full range of motion in the injured compared to the opposite hip. He did still have weakness of the dorsiflexors of the right foot but could walk without a brace. Roentgenograms showed satisfactory healing of the acetabular fracture with a congruous joint surface and no evidence of femoral head avascular necrosis (Fg. 3A and 3B).

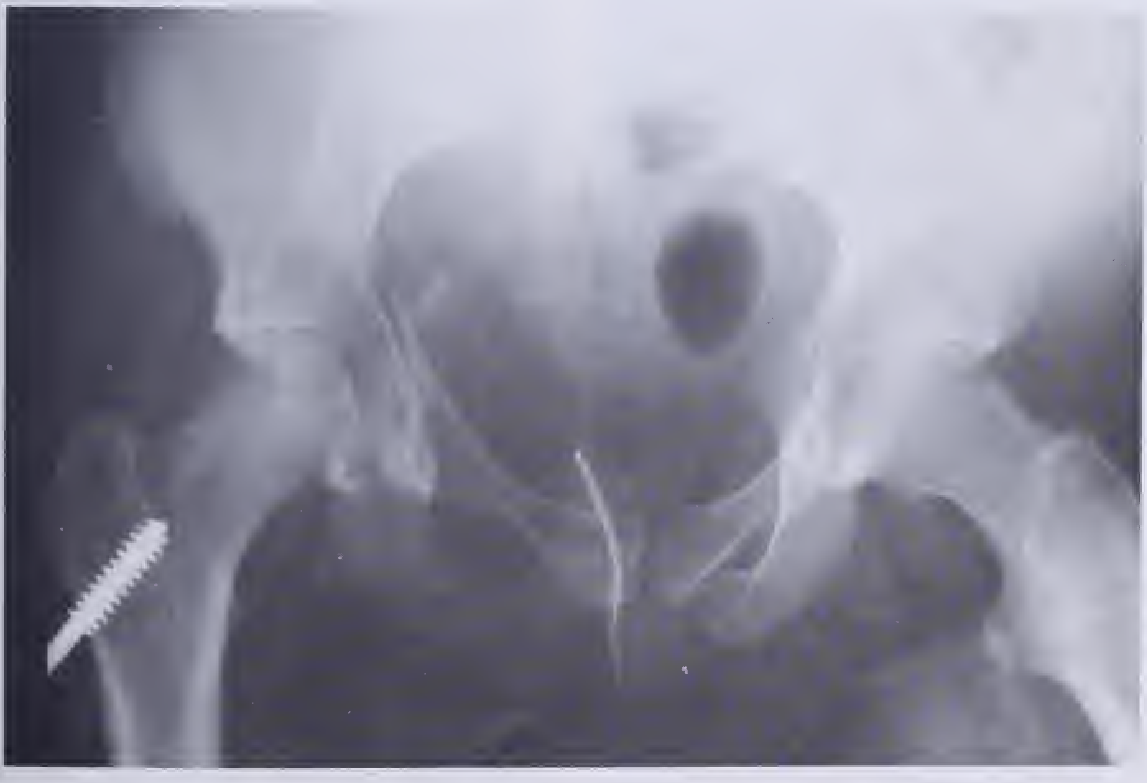

Figure 2 - X-ray after reduction with lateral traction on the day of injury.

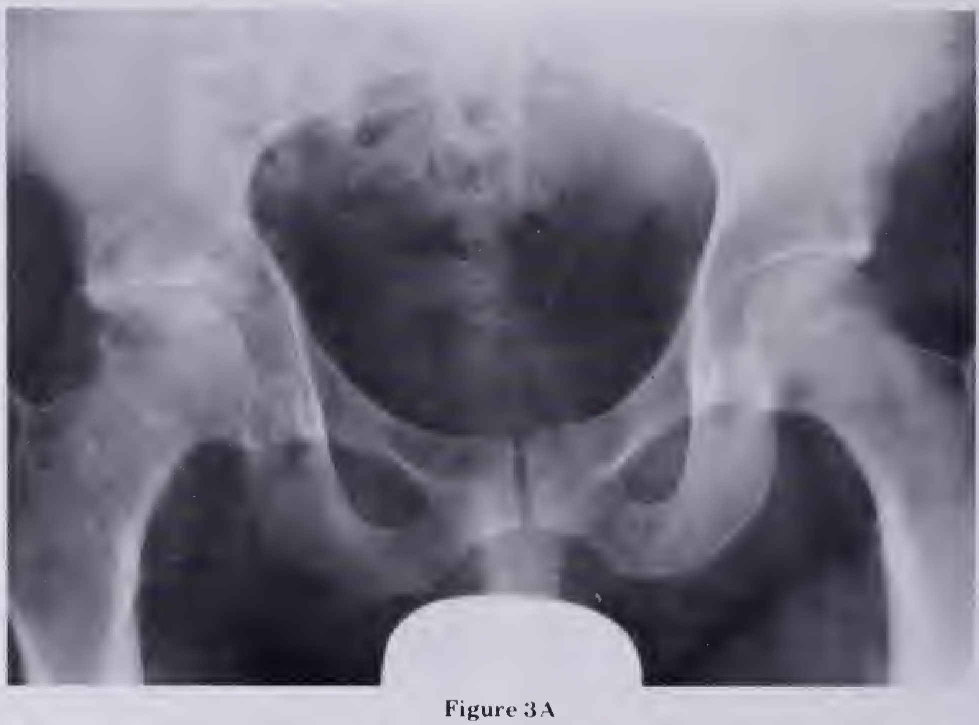

Figure 3A

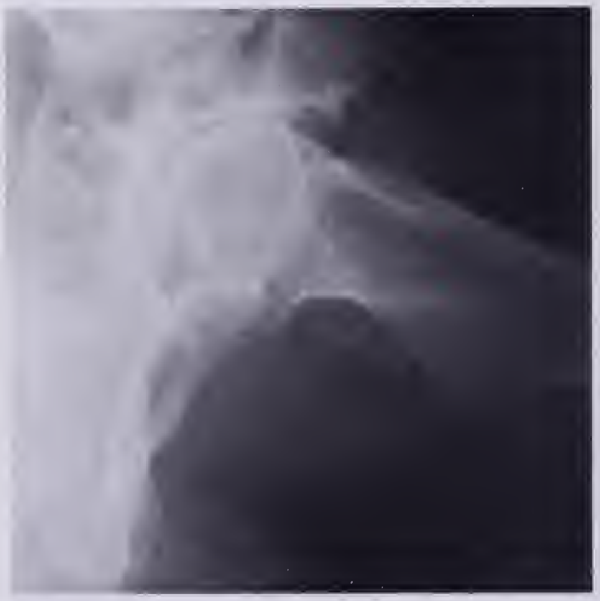

Figure 3B

Figure 3A and 3B - X-rays of the hip 12 months post-injury show congruent joint surface without femoral head avascular necrosis.

Summary

This case illustrates that closed treatment can be done effectively for even the more severely communited fracture-dislocations of the hip. This avoids problems of potential infection which can range up to twenty-six percent of cases reported in the literature.[4,5] The key point for emphasis is that the reduction must be done promptly and must be maintained for a sufficiently long period in traction until fracture consolidation is evident. A program which incorporates range of motion exercises while the joint surface is healing provides for nutrition of the cartilage surface and helps to restore the joint to normal function.[6] However, if anatomic reduction cannot be achieved at the time early closed reduction is attempted, operative intervention would be indicated.[7]

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PERINATAL PAGE

Drugs During Pregnancy: Are Any Really Safe?

MANY women avoid taking drugs during pregnancy because of the growing awareness of potential drug effects on the unborn infant. Despite this improvement in prenatal education, the typical woman takes two or more drugs (besides vitamin and iron supplements) before labor. This number of drugs increases rather than decreases as pregnancy advances. Aproximately half are over-the-counter preparations such as acetaminophen, decongestants, cough suppressants, and aspirin.

The initial prenatal visit should include a complete history of any prescribed or non-prescription medications taken at conception, during the first trimester, and later in gestation. Any drugs taken by the father-to-be should also be sought, although their impact on reproductive outcomes is unknown. The most common drugs taken at conception and during early pregnancy include diet pills (amphetamine-like) and oral contraceptives.

Our knowledge about specific drugs has been gathered from animal studies, case reports, and epidemiologic studies. Animal studies are most often undertaken before the drug is marketed with the pregnant animal being exposed to high doses during early fetal development. More than 5,000 drugs are listed in the Physicians' Desk Reference for prescription and non-prescription medications. Warnings for use during pregnancy apply for nearly all drugs although these statements are often overly cautious.

Few drugs are known to cause birth defects. Phenytoin, (which should be continued during pregnancy), is the only drug thought to cause birth defects. Other drugs such as coumadin, alcohol, folic acid antagonists (methotrexate, aminopterin), androgens, isotretinoin, thalidomide, and diethylstilbestrol are not recommended or necessary during pregnancy. Drugs suspected to be teratogenic such as benzodiazapines, nicotine, valproic acid, and alkylating agents do not need to be continued during pregnancy.

WILLIAM F. RAYBURN, M.D.
Associate Professor, Department of Obstetrics and Gynecology, University of Nebraska Medical Center

Most drugs have no apparent long-term effects on the fetus. Drugs or chemicals account for no more than 1% of all major malformations. The overall incidence of birth defects in the general population is 2-4%, and most drugs pose no increased risk to the fetus. Teratogenic effects from drugs not only include obvious malformations or abortions but also involve functional deficits, altered fetal growth, carcinogenesis, and mutagenesis. Physiologic alterations may occur and depend on the dose, duration, drug metabolics, and gestational time of exposure.

Accurate gestational dating is important when a person is concerned about drug exposure during early gestation. The drug may have been taken before the fertilized egg has implanted or before embryogenesis. In contrast, certain medications to treat underlying medical disorders (grand mal seizures, severe asthma, chronic hypertension) should be continued when pregnancy is suspected unless the disorder is under sufficient control or in remission.

An amniocentesis to screen for drug or metabolite levels is not recommended. No drug has been knowingly linked to a chromosomal abnormality. Ultrasonography may be helpful in searching for major malformations, excessive fetal growth, and pregnancy dating. Although normal fetal and placental findings may be noted on ultrasound visualization, these findings alone do not guarantee a healthy fetus, but the woman may be reassured that the overall risk of a major malformation is less than the general pregnancy population.

Perinatal outcomes are improved with the appropriate selection of prescription drugs to treat underlying medical complications. A search is needed to determine the lowest effective drug dose necessary to minimize fetal effects. Serum concentrations of such drugs as aminophyllin, phenytoin, phenobarbital, and digoxin are found to decrease during pregnancy because of the increased intravascular volume and renal clearance. Drug serum levels should be maintained within a low-normal range once the dose of medication is increased.

In summary, increased patient awareness of potential adverse effects of drugs during pregnancy has led to a decreased use of drugs. Despite therapeutic restraints, more drugs may be taken as pregnancy advances to offset unpleasant symptoms encountered during pregnancy. The ultrasonic finding of a healthy-defects, and phenytoin is the only teratogenic drug recommended for continued use during pregnancy. The ultrasonic finding of healthy-appearing fetus is reassuring but does not necessarily guarantee the theoretic concern of altered fetal growth, functional deficits, carcinogenesis, and mutagenesis. The lowest effective dose of the medication for relief of symptoms or treatment of an underlying medical disorder is recommended. Recommendations of specific drugs used during pregnancy are in the books listed below.

Suggested Readings

1. Briggs G, Bodendorfer T, Freeman R, Yaffee S: **Drugs in Pregnancy and Lactation.** Baltimore: Williams & Wilkins, 1983.
2. Rayburn WF and Zuspan FP (eds): **Drug Therapy in Obstetrics and Gynecology,** 2nd edition. Norwalk, Conn: Appleton, Century, Crofts, 1986 (in press).
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LETTER TO THE EDITOR

From:
Jay G. Kenik, M.D., Chairman
Medical and Scientific Committee
Arthritis Foundation, Nebraska Chapter

The Nebraska Chapter of the Arthritis Foundation is pleased to announce that it will receive applications for research grants from **Nebraska** physicians and/or allied health professionals.

One or more research grants in the amount of $5,000 may be awarded to applicants in the medical profession, as well as the allied health professions, to provide support for clinical research in the behavioral, allied health and medical sciences relative to arthritis and related disorders. It is requested that the Nebraska Arthritis Foundation's grant should be the lead supporting grant and the project be of such a nature that it can be completed in a reasonable length of time as judged by the Medical and Scientific Committee of the Nebraska Chapter.

Grants would be awarded based on national peer review; however, the Nebraska Chapter Medical and Scientific Committee reserves the right to determine which grant proposals are forwarded for national review. Applications will be accepted no later than May 1, 1986.

Requests for general information and instructions can be sent directly to the Nebraska Chapter of the Arthritis Foundation, 2229 N. 91st Court, Omaha, Nebraska 68134.

President's Page

MORE ON UNIFIED MEMBERSHIP

The discussion of unified membership in the AMA will often raise the question; what purpose does the AMA serve and what does it do for me or for medicine in general. A brief review of its early years, the reason for its inception, the problems besetting it during the last half of the 19th century reveals its purpose, direction, and accomplishments of which all of us and medicine in general are today the beneficiary. Today, as over the past 100 plus years this same force is still the leading voice speaking for medicine.

In 1846 a few physicians met in New York for the purpose of forming an organization that would raise the standard of quality of medicine by upgrading medical schools, ridding the nation of physicians whose philosophy of medicine has no scientific basis, and organizing a public health department in the federal government. Meetings continued till finally May 2, 1848, when with 239 representatives from 22 states the first Annual Session of the AMA was held in Baltimore. The problems ahead were staggering but this represented the first step in raising the quality of medicine as we know it today.

In the middle of the 19th century all healers were lumped together in the minds of the public. Physicians referred to above along with assorted frauds, quacks, and cultists were all considered as M.D. equals. Many of these groups had their own schools and some had large and influential associations. Even the quality of some legitimate schools was below the standards of that period. When Charles Eliot became president of Harvard in 1869 (the first year the school provided a microscope for students) he urged the dean of the medical school to institute a written exam as a requirement for graduation. The dean answered with some exaggeration, the majority of students couldn't write. Proof is a little thin but there is some indication that Omaha had four medical schools in the late 1800's, one of which granted a degree after six weeks of study. In 1884, only three states required more than a diploma to secure a license. In Indiana, one applicant allegedly succeeded in submitting a chinese napkin for a diploma. The nostrum industry (snake oil cures) was a powerful multimillion dollar industry at this time with effective lobbying powers in Washington. A gullible public succumbed to this fraud unaware and uncaring the potions were worthless and often laced with alcohol.

By the turn of the century the constant battles were producing results. The Flexner Report which the AMA strongly supported set the stage for a revolution in medical education which saw many of the cult schools promptly close. The battle for a Pure Food and Drug Law sounded the end, to a great degree, for the nostrum industry, and establishment of a Federal Department of Health laid the basis for states to follow suit and set standards for hygiene, sanitation, disease control and instituting a valuable Vital Statistics Department.

These projects occupied much of the first 60 years of the AMA's existence and laid the groundwork for a health care industry which was to provide the highest quality of care the world has ever seen. Did the AMA accomplish this single-handedly? Certainly not, but it has been the primary force in all these facets of the health care industry and constantly maintains quality as its pole star. Specialty societies today consume much of physicians' attention but these organizations as well as state and county associations are held together in a federation by the AMA.

If this umbrella is not kept strong in these perilous times the forward progress could slow or even halt. The AMA has had its resounding successes along with some bitter defeats these past 140 years but with proper support progress will be ensured.

Francis D. Donahue, M.D.
President

The Auxiliary

PRESIDENT'S MESSAGE

MID-WINTER BOARD MEETING

There is an important date coming up to mark on your calendar. February 25 will be our Mid-Winter Board Meeting in Lincoln. It will be a mini-health seminar. Speakers will be Dr. Duane Krause of Fremont talking about the importance of mammography, and Dr. George Larson of Lincoln, talking about the importance of early detection of colorectal cancer. We will also have a National Representative with us. Mary Hanson (Mrs. Jerome) of Colorado Springs, Colorado, who is a member of the 1985-86 Health Projects Committee, will give an overview of the Health Projects in general and specifically talk about Aging.

The meeting will be at the Villager at 5200 O Street, beginning with 9:30 a.m. coffee. Lunch will be served at 12:00 noon. You will be hearing more about this.

President-Elect Bev Kruger and First-Vice President Colleen Adam will be attending the National Cluster Meeting in Chicago, February 18-20.

* * *

Make plans to attend the annual meeting at the Marriott Hotel in Omaha, April 25-28. The business meeting will be Friday morning. The brunch will be held at the Omaha Country Club on Saturday morning. Jean Cavanaugh, North Central Regional Vice-President, will be our national representative.

Mrs. Les Grace

"BACK TO THE FUTURE" UPDATE — MOMSA

If you see a Mutt and Jeff sized equivalent around town walking about 2 feet off the ground, look closely—it's probably Debbie Elson and Penny Keim! To say the November seminar, "Back to the Future - The Cause & Effects of Alphabet Medicine" was a success is an understatement. With 84 registrants, coming from Omaha, Lincoln, Hastings, Grand Island, Blair, Fremont, Oakland, and even Scottsbluff, excellent facilities at Methodist Hospital's Continuing Education Center, the support of the Continuing Education Center, and the hospital administration, knowledgeable speakers, super handouts, and attendees who were committed to being informed and acting on that new found information, there was only one way for things to go.

It is always scary to try something new. The seminar was in direct response to what we perceived as the interest and needs of our auxilians when we made the telephone survey of our membership last June. EVERY participant responded on the evaluation forms that she wished to know more and would attend another seminar.

Our mothers didn't raise any dummies! So-o-o-o we intend to do it again in '86. We will perhaps try a new twist though—a basics tract and an advanced tract for each topic so participants can choose where they feel they'd best benefit on a given topic. Additionally, we will try to allow more time for questions and answers. We need some suggestions on topics though, so please put on your thinking cap, and let us know what you need to hear more about.

Our sincere thanks to those who helped mail, made home calls, stuff packets, provide displays, welcome registrants, and most of all THOSE WHO CAME. The evaluations and the notes you sent were terrific warm fuzzies. It sounds boastful for us to say, "you really missed a terrific day," but we've heard from many sources that you're telling your friends who weren't there just that. THANK YOU FOR YOUR SUPPORT. We look forward to double the turnout in '86!!

Penny Keim and Debbie Elson

University of Nebraska Medical Center News:

The naming of a University of Nebraska Medical Center audiovisual suite, honoring long-time faculty members Drs. Edward A. Holyoke and John S. Latta, has been submitted for approval to the Board of Regents.

The "Holyoke-Latta Audiovisual Suite" will provide a much more effective and attractive audiovisual area for students in the College of Medicine's department of anatomy. The suite, equipped with educational audio-visual equipment, computers and related hardware, will be converted from two rooms.

The Regent's approval will allow alterations with free standing carrels, which will permit much more effective use of the space, while allowing ample room for small group discussion.

The College of Medicine Alumni Association has pledged approximately $6,500 for remodeling.

Dr. Holyoke, professor of anatomy, emeritus, has been recognized for his contributions to the three-volume publication celebrating the Medical Center's one-hundredth anniversary in 1981.

A nationally-known author, Dr. Holyoke has written four anatomy books, several articles for medical journals, and presented numerous papers to medical organizations in the U.S. and Great Britain. He first joined the faculty in 1932 and was anatomy chairman for 13 years. He received the Distinguished Service to Medicine Award in 1982.

Dr. Latta, professor of anatomy, emeritus, was chairman of the anatomy department from 1941 to 1961 and received the college's Distinguished Service to Medicine Award in 1966. A "Latta Lectureship" was established in 1982 by the College of Medicine Alumni Association to honor his contribution to the Department of Anatomy and the Medical School.

He has been active on the Nebraska Anatomical Board, the Nebraska Basic Science Board, the College of Medicine Library Committee and the Nebraska Senate Library Committee.

UNO NEWS: Halley's Comet

Omaha — A trip to the island of St. Lucia in the southern Caribbean to view Halley's Comet will be led by Dr. John Kasher and Professor Robert Schmidt, astronomy professors of UNO's Physics Department.

During late March and early April, when the comet will be at its brightest, it will be poorly visible from the Continental United States. But it will be easily visible in the southern Caribbean. This trip will be from March 22 to March 29.

These experienced astronomers will serve as celestial tour guides presenting seminars and telescopic tours to view Halley's Comet, the Southern Cross, Alpha Centauri, and the Magellanic Clouds, all clearly visible from St. Lucia.

The travel package includes roundtrip airfare from Omaha to St. Lucia, 7 days/nights lodging, all meals, tennis, golf, sport fishing, sailing cruise, horseback riding, as well as the celestial seminars. The cost is $1200.

For more information or to reserve space on the trip call UNO College of Continuing Studies, Richard Lombardo at 554-2755.

In Memoriam

By medicine life may be prolong'd
yet death
Will seize the doctor too.
—Shakespeare

L. E. Sauer, M.D. — (Born August 14, 1895 - died September 25, 1985) - Medical Specialty - General Practice. Doctor Sauer was a graduate of the University of Nebraska College of Medicine in 1925 and practiced in Tekamah, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Doctor Sauer is survived by his wife, Helen; daughter, Marjorie Spradling, Walnut Creek, CA; son, Clarke of Gladstone, MO; step-daughters, Barbara Hawkins and Kathryn Eriksen, both of Craig; three grandchildren, six stepgrandchildren; and 15 step-great grandchildren.

Robert Westbrook, M.D. — (Born July 15, 1933 - died November 9, 1985) - Medical Specialty - Family Practice. Doctor Westbrook was a graduate of the Louisiana State University School of Medicine in 1958 and practiced in Sargent, Nebraska. He was a member of the Nebraska Medical Association. Doctor Westbrook is survived by his wife, Gloria, one daughter, Mary Nell, two sons, Robert Ira Jr. and Michael William, all at home, mother, Mrs. A.M. Westbrook of Shreveport, LA, sisters, Iralene Peavey of Shreveport and Gloria Wetstone of Pensacola, FL, brother, Max of Ruston, LA, and several nieces and nephews.

V. S. Barkey, M.D. — (Born August 3, 1890 - died November 17, 1985) Medical Specialty - General Practice. Doctor Barkey was a graduate of the Lincoln Medical College in 1917 and practiced in Lincoln. He was a member of the Nebraska Medical Association and the American Medical Association. Doctor Barkey is survived by his wife, Gladys; son-in-law, Dr. Joe Carlson, Glendale, CA; grandson, Douglas Carlson, Fresno, CA; granddaughter, Mrs. Keven (Deborah) Gensel, Ontario, CA.

Coming Meetings

1986 ANNUAL SESSION — April 24-28 — Omaha Marriott

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

AIDS: THE CURRENT PICTURE — February 11 & 25, 1986, 7:30-9:30 p.m. CST. Presented by Dedicated Telephone Line to: Scottsbluff, Alliance, Sidney, Columbus, North Platte, Grand Island, Omaha, and Lincoln. Co-sponsored by The Colleges of Dentistry, Medicine, Nursing and Pharmacy, University of Nebraska Medical Center. Speakers: Johnathan C. Goldsmith, M.D., U. of Nebraska Medical Center; Greg Wright, M.D., Nebraska Department of Health; Paul Stoesz, M.D., Nebraska Department of Health. Objective is to describe AIDS, including magnitude, clinical and research implications and considerations for health planning. For further information contact Muriel Munchrath, RN, MSN, College of Nursing, phone (402) 559-6412 or Renee Weber, Center for Continuing Education, phone (402) 559-4152, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68105.

STRATEGIES IN ONCOLOGY AND HEMATOLOGY FOR THE PRIMARY CARE PRACTITIONER — February 17-21, 1986 at Saddlebrook, The Golf and Tennis Resort, Tampa, Florida. Sponsored by the University of Nebraska College of Medicine, Departments of Internal Medicine and Family Practice. Registration fee is $350. Credit is for 16 hours of Category I of the Physician's Recognition Award. For further information contact Marge Adey, Center for Continuing Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telephone (402) 559-4152.

February 26-March 5, 1986, Review and Update: General Prediatrics & Family Practice, Sheraton Royal Waikoloa, Kailua, Kona, Hawaii.

March 2-7, 1986, 6th Annual Keystone Medical Ski Conference "Diagnostic Dilemmas - The Approach and the Answers", Keystone Lodge, Keystone, Colorado. This course is held in conjunction with the Dental Ski Conference and the Nursing Ski Conference.

March 5-12, 1986, Review and Update: General Pediatrics & Family Practice, Royal Lahaina, Kaanapali Beach, Maui, Hawaii.

FAMILY PRACTICE REVIEW — April 14-25, 1986 at Omaha, Nebraska. Registration Fee: $850. 100 Hours of AMA Category I and 100 Prescribed Hours American Academy of Family Physicians.

FAMILY PRACTICE REVIEW — May 5-16, 1986. Registration fee: $850. 100 Hours of AMA Category I and 100 Prescribed Hours American Academy of Family Physicians.

UPDATE ON GENERAL PEDIATRICS — June 29-July 3, 1986. Jackson Hole Racquet Club, Jackson, Wyoming. Registration fee: $300. 16 Hours AMA Category I.

SPORTS MEDICINE UPDATE — July 7-10, 1986 at Jackson Hole Racquet Club. Jackson, Wyoming. Registration fee: $300. 16 Hours AMA Category I.

July 23-26, 1986, Lake Okoboji Sports Medicine Conference, Lake Okoboji, Iowa.

For further information, contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105. Phone (402) 559-4152.

CREIGHTON UNIVERSITY

Feb. 5-12, Infectious Disease/Cardiovascular Disease, 24 hours - Turtle Bay, Oahu (weekly programs through Mar. 19). Fee: $75.00 with Travel Group.

Feb. 15-22, Pathophysiology and Treatment of Esophageal Disorders, 24 hours - Wyndham Rose Hall, Montego Bay, Jamaica. Fee: $300.-00.

Mar. 1-8, Primary Care of Adolescents, 24 hours - Posada Vallarta Hotel, Puerto Vallarta, Mexico. Fee: $300.00.

Mar. 2-9, Pulmonary Medicine/Infectious Disease, 24 hours - Virgin Islands Cruise. Fee: $300.00.

Mar. 13-14, Florida Tutorial (OB/GYN), 14 hours - Marriott Hotel, Orlando, Florida. Fee: $175.00.

April 16, Infectious Diseases Symposium, Omaha.

May 17-31, Update in Infectious Diseases and Endocrinology, 36 hours - Scandinavia Study/Tour. Fee: $400.00.

May 23-25, Family Medicine Update, Okoboji, Iowa.

May 26-29, Symposium on Foregut Disease, 24 hours - London, England. Fee: $50.00 with Travel Group.

June 16-30, GI Medical/Surgical Update, 36 hours - Germany Study/Tour. Fee: $400.00.

Sept. 18-30, Cardiology/Rheumatology Update, 36 hours - Ireland Study/Tour. Fee: $400.00.

For further information, contact the Division of CME, Creighton University School of Medicine, Omaha, Nebraska 68178 402/280-2550.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICAL ETHICS — March 7, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, Kansas.

ANNUAL POSTGRADUATE PEDIATRICS SYMPOSIUM — March 12-13, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

SAM E. ROBERTS NUTRITION SYMPOSIUM — March 25, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

AIDS: ARE YOU AT RISK? March 28, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

COMMON GASTROENTEROLOGY PROBLEMS — April 1, 1986 at Alameda Plaza Hotel, Wornall Road at Ward Parkway, Kansas City, Missouri.

AMERICAN MEDICAL SOCIETY ON ALCOHOLISM AND OTHER DRUG DEPENDENCIES — April 18-22, 1986 at the Westin St. Francis Hotel in San Francisco, California. Information may be obtained by writing AMSA DD, 12 West 21st Street, 7th Floor, New York, New York 10010.

THIRTY-SIXTH ANNUAL POSTGRADUATE SYMPOSIUM ON ANESTHESIOLOGY — April 25-27, 1986. Sponsored by the University of Kansas Medical Center. The course will be held at the Crown Center Hotel in Kansas City, Missouri. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

MICROCOMPUTER JUNGLE: IMPACT ON HEALTH CARE — April 17-18, 1986, sponsored by the University of Kansas Medical Center. Location of the course will be Doubletree Hotel, Overland Park, Kansas. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

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SCHEDULED MEETINGS

THE NEBRASKA CHAPTER OF THE AMERICAN ACADEMY OF FAMILY PHYSICIANS will hold their 38th Annual Scientific Assembly, April 11 and 12, 1986 at the Marriott Hotel, Omaha, Nebraska. Contact: Phyllis Hansen, Executive Director, Nebraska Academy of Family Physicians, 401 No. 117th, Suite 202, Omaha, Nebraska 68154 (402) 333-5856.

ORGANIZATIONS, STATE

American Cancer Society, Nebraska Division, Inc.
Don W. McClure, Exec. Vice President
8502 West Center Rd., Omaha 68124

American Diabetes Association — Nebraska Affiliate, Inc.
Ron Van Ryswyk, Executive Director
7377 Pacific St., Ste. 216A, Omaha 68114

American Heart Association, Nebraska Affiliate
Dennis N. Nissen, Executive Director
3624 Farnam St., Omaha 68131

American Lung Association of Nebraska
8901 Indian Hills Dr., Ste. 107, Omaha 68114

American Red Cross
P.O. Box 83267
1701 "E" St., Lincoln 68501

Arthritis Foundation, Nebraska Chapter, Inc.
Mrs. Ellen Wright, Exec. Director
2229 N. 91st Court, Omaha 68134

Blue Cross and Blue Shield of Nebraska
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Creighton University School of Medicine
Richard O'Brien, M.D., Dean
California at 24th St., Omaha 68178

Cystic Fibrosis Foundation, Nebraska Chapter
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5017 Leavenworth St., Omaha 68106

Dairy Council of Central States, Inc.
Suite 103, Hillcrest Bldg.
76th & Main, Ralston 68127

Division of Rehabilitation Services
Nebraska Department of Education
6th Floor, 301 Centennial Mall South, Lincoln 68509

Division of Rehabilitation Services for the Visually Impaired
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4600 Valley Road, Lincoln 68510

Easter Seal Society of Nebraska
Mr. Joe Wilson, Executive Director
12177 Pacific St., Omaha 68154

Health Manpower Referral Service, State of Nebraska
P.O. Box 95007
3rd Floor, State Office, 301 Centennial Mall South
Lincoln 68509

Lincoln Council on Alcoholism and Drugs, Inc.
Room 212, 215 Centennial Mall, Lincoln 68508

March of Dimes — Birth Defects Foundation
1618 L Street, Lincoln 68508

MID-PLAINS POISON CONTROL CENTER
Childrens Memorial Hospital, 8301 Dodge St., Omaha 68114
(402) 390-5400 or 800-642-9999 (toll free Nebraska)

Missouri Valley Dermatologic Society
Richard Q. Crotty, M.D., Secretary
634 Doctors Bldg., Omaha 68131

Muscular Dystrophy Association
1912 No. 90th St., Lower Level, Omaha 68114

National Kidney Foundation of Nebraska
Karen Engelsman, Executive Director
2217 No. 91st Plaza, Omaha 68134
(402) 397-9234 — NE toll free 800-642-1255

National Multiple Sclerosis Society — Nebraska-Iowa Midlands Chapter
3624 Leavenworth, Omaha 68105

National Society to Prevent Blindness, Nebraska Affiliate
4600 Valley Road, Lincoln 68510

Nebraska Academy of Ophthalmology
Jan Jensen, M.D., President
3011 Avenue A, Kearney 68847

Nebraska Academy of Otolaryngology
Michael Crawford, M.D., President
201 Ridge St., #311, Council Bluffs, IA 51501

Nebraska Allergy Society
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Dept. of Radiology, UNMC - 42nd & Dewey Ave., Omaha 68105

Nebraska Association of Pathologists
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3100 "O" St., Ste. 7, Lincoln 68510

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1512 First National Bank Bldg., Lincoln 68508

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2121 South 56th St., Lincoln 68506

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Nebraska State Department of Health
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P.O. Box 95007, 301 Centennial Mall South, Lincoln 68509

Nebraska State Obstetric and Gynecology Society
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209 West 9th St., Hastings 68901

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AMA News Notes

(Continued from page 10A)

increase in the percentage of people who said that physicians' fees were reasonable, from 27% to 32%. The percentage who said that people are losing faith in physicians decreased four points since 1984, from 68% to 64%. The percentage of people who said that physicians explained things well to their patients increased six points from 44% to 50%. The percentage of people who said that physicians were too interested in money was down five points from 67% to 62%. The change in public attitude may reflect the efforts of state, county, and specialty societies to enhance the image of physicians, Dr. Freshnock said at the workshop. In addition, the public may be coming to view the professions more realistically.

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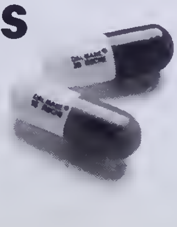
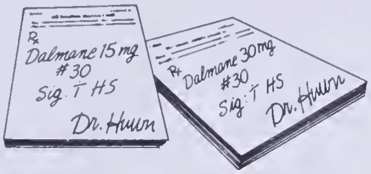


References: 1. Kales J, *et al: Clin Pharmacol Ther 12* 691-697, Jul-Aug 1971 **2.** Kales A, *et al Clin Pharmacol Ther 18*:356-363, Sep 1975 **3.** Kales A, *et al. Clin Pharmacol Ther 19* 576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982 **5.** Frost JD Jr, DeLucchi MR *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983 **8.** Tennant FS, *et al.* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984 **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977



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THE NEBRASKA MEDICAL JOURNAL

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1986

NMA Annual Session

Programs Being Developed

NEBRASKA ALLERGY SOCIETY

Saturday, 8:00 a.m. - 10:00 a.m.

The course is designed to review the diagnostic tests used in allergy, compare them and make recommendations for their use.

NEBRASKA SOCIETY OF ANESTHESIOLOGISTS

Saturday, 10:00 a.m. - 1:00 p.m.

This program will cover the surgical aspects of salivary gland disease and the pros and cons of the Caldwell-Luc operation.

MISSOURI VALLEY DERMATOLOGIC SOCIETY

Saturday, 9:00 a.m. - 12:00 noon

Dermatology Update 1986 - A Review of New Developments in the Diagnosis and Management of Common Skin Conditions.

AMERICAN HEART ASSOCIATION, NEBRASKA AFFILIATE

Friday, 8:00 a.m. - 12:00 noon

Advances in patient care through prevention - good medicine and good business. The presentations will focus on the role and value of implementing cardiovascular disease prevention programs into the office practice with emphasis on strategies for enhancing patient care and business economics.

NEBRASKA ACADEMY OF OPHTHALMOLOGY

Saturday, 9:30 a.m. - 5:00 p.m.

Doctor Tom Roussell from the Bascom Palmer Eye Institute will speak on serious ocular infections including endophthalmitis. A morning hands-on session directed toward primary care physicians will address common ophthalmologic problems.

NEBRASKA ACADEMY OF OTOLARYNGOLOGY

Saturday, 1:00 p.m. - 5:00 p.m.

The first session will present a review of the surgical and anesthesia care for an adult or child undergoing liver transplantation. The second session will instruct the clinician on the background information of Midazolam for clinical use of this drug. The final session will present a clinical update of AIDS and the implications for health personnel involved in caring for the patient with AIDS.

April 24-28, 1986
Omaha Marriott Hotel
Omaha, Nebraska

NEBRASKA CHAPTER, AMERICAN ACADEMY OF PEDIATRICS

Saturday, 9:00 a.m. - 5:00 p.m.

The Nebraska Chapter of the American Academy of Pediatrics' program will present an update on pediatric pharmacology.

NEBRASKA PERINATAL ORGANIZATION

Thursday & Friday, 8:00 a.m. - 5:00 p.m.

The Nebraska Perinatal Organization, NAACOG, ACOG, and the Nebraska State Department of Maternal-Child Health are combining resources to offer presentations on "Baby Doe," family-centered maternity care, DRGs in perinatal medicine, adoption, perinatal nutrition, and health care costs. Breakout sessions will spin off many of these plenary talks.

NEBRASKA SOCIETY OF PLASTIC & RECONSTRUCTIVE SURGEONS

Saturday, 10:00 a.m. - 11:30 a.m.

The Nebraska Society of Plastic and Reconstructive Surgeons will meet for their annual business meeting on Saturday, April 26.

NEBRASKA PSYCHIATRIC SOCIETY

Saturday, 1:00 - 4:00 p.m.

The Nebraska Psychiatric Society will present a program entitled "The Difficult Patient". The program will discuss evaluation and treatment of patients whose physical symptoms and complaints are either caused or exacerbated by their emotional problems. Frequently, these patients resist referral to psychiatric treatment, and the family practitioner or internist must consequently manage their treatment. This short course will discuss evaluation procedures and useful management techniques.

NEBRASKA CHAPTER, AMERICAN COLLEGE OF SURGEONS

Saturday, 10:00 a.m - 6:00 p.m.

This course is designed as a forum for presentation of topics of interest to general surgeons. Emphasis is placed on clinic reviews and original resident research.

Also Participating

NEBRASKA CHAPTER, AMERICAN COLLEGE OF EMERGENCY PHYSICIANS
NEBRASKA SECTION, AMERICAN COLLEGE OF OBSTETRICIANS & GYNECOLOGISTS
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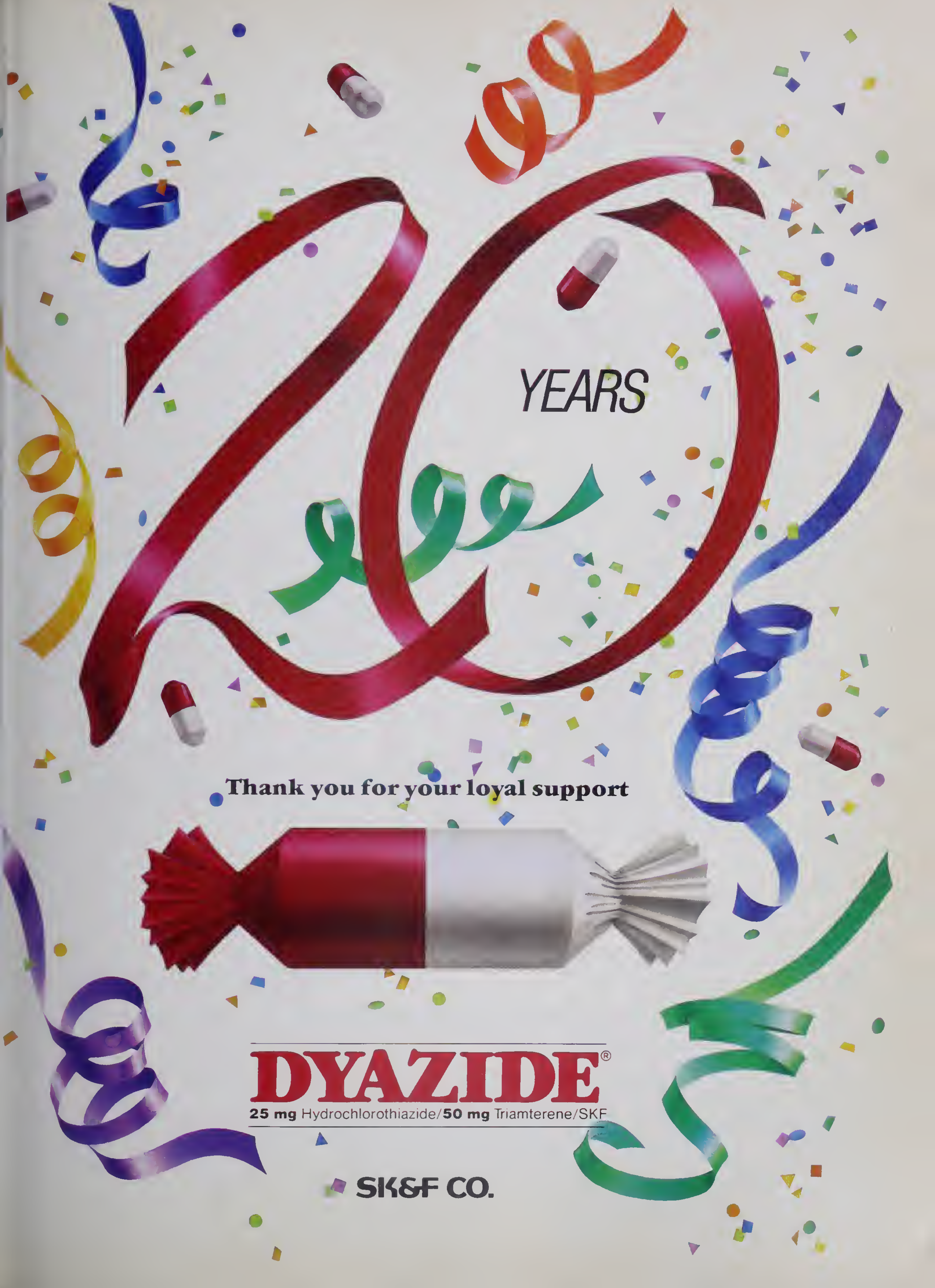

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118th Annual Session

April 24-28, 1986

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Harrison L. Rogers, Jr., M.D.

President of the American Medical Association

Harrison L. Rogers, Jr., M.D., a general surgeon from Atlanta, GA, will be the speaker at the 1986 Inaugural Banquet at 7:30 p.m. on Sunday, April 27. The Banquet will be held in the Grand Ballroom at the Omaha Marriott.

His speech topic will be "Future Directions of Health Care".

Dr. Rogers brings a rich background of medical and medical association experience to his position. His direction is helping organized medicine move confidently through this period of change and transition.

You will want to share the experience of his presentation with your colleagues. Be sure to reserve the date now.

AMA News Notes

Health Care Financing Administration (HCFA) officials have drafted a letter that is intended to inform Medicare beneficiaries of their right to appeal hospital attempts to discharge them before they are ready to go home.

The letter, which all hospitals would be required to give to all Medicare patients on admission, follows complaints that some hospitals were sending patients home prematurely. The hospital industry requested that a form letter be developed.

The letter has been sent to patient, hospital, and physician representatives — including the American Medical Association — for suggestions. It is expected to receive final approval by the end of January and to be in place in hospitals by the end of February.

* * *

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(Continued on page 10A)

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Spouses are invited to participate in special activities; participants and faculty will enjoy an evening of "dining out" together on Thursday, April 10. Participants are housed at the Immanuel Plaza Motel on the Medical Center campus.

First Day

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Percutaneous Transluminal Coronary Angioplasty
    Richard E. Collins, M.D.
Cholesterol and Coronary Artery Disease
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Current Methods of Myocardial Infarction Reduction
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After Infarct — What Next?
    Michael M. Dehning, M.D.
Case Studies
    Richard E. Collins, M.D.
    Michael M. Dehning, M.D.

Second Day

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Current Therapy for Hypertension
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Future Trends
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For more information on this or future Fellowships, contact Marion Kaple, Holling Education Center, Immanuel Medical Center, 6901 North 72nd Street, Omaha, Nebraska 68122, (402) 572-2340.

Jerald R. Schenken, M.D.

"IS THERE A MEDICARE IN OUR FUTURE?"

Hear Jerald R. Schenken, M.D., address this topic at the NMA Annual Session Breakfast Meeting, Sunday, April 27, 1986, 8:00 a.m. at the Omaha Marriott Hotel.

Doctor Schenken is a member of the AMA Board of Trustees and will be bringing us the latest information on Medicare.

Reservation forms will be sent in late March.

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AMA News Notes

(Continued from page 7A)

insurance, large numbers of embattled Massachusetts physicians are considering a switch to low-risk practice, retiring, or leaving the state.

At least 5% of the state's obstetricians have plans to quit obstetrics. And preliminary information gleaned from a Massachusetts Medical Society survey showed that, of 60 physician members called in a two-day period, 20 physicians were considering leaving the state, 14 were planning to retire, and two physicians — both neurosurgeons — were planning to get out of high-risk surgery.

The retroactive rate increases for professional liability insurance mean that high-risk surgeons, whose rates have been frozen at 1983 levels for the last three years, will have to pay an additional $31,000 within the next four months to satisfy the increases for 1983, 1984, and a portion of 1985.

For the same period, obstetricians and

(Continued on page 20A)

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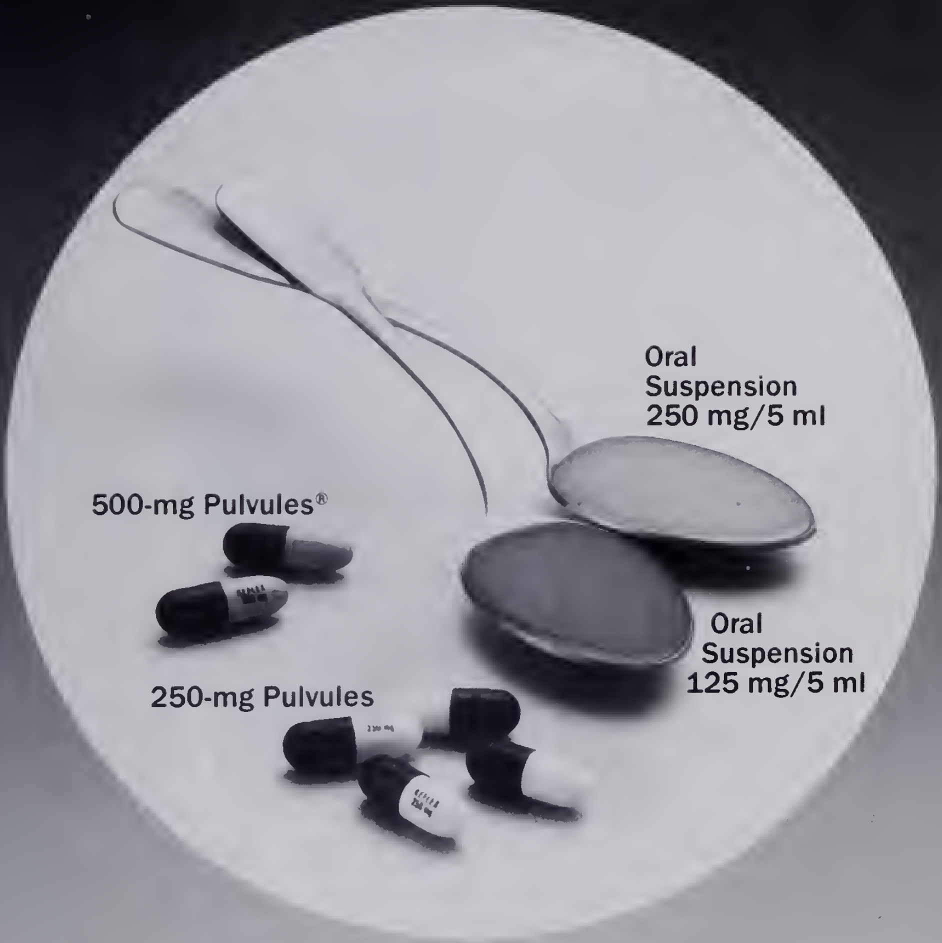

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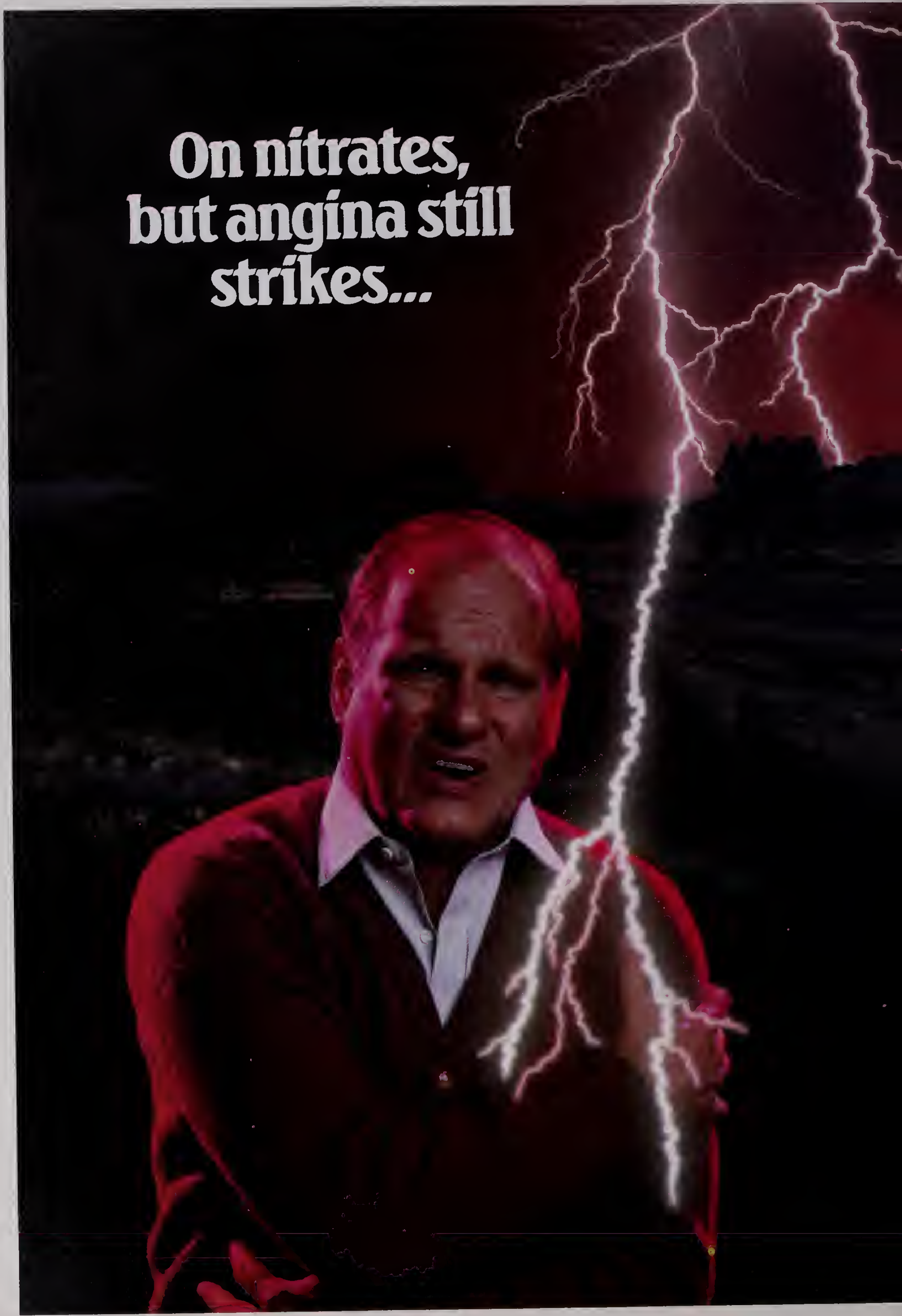
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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. 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One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C:* There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block. 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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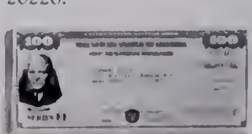

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THE NEBRASKA MEDICAL JOURNAL

What We as Doctors Can Do to Save Lives: Safety Belt Usage

DALE L. KEMMERER, M.D.
Director, Emergency Department, Grand Island Memorial Hospital, St. Francis Medical Center, Grand Island, Nebraska

SAFETY belt usage has increased dramatically in the past year. This dramatic increase is confirmed by numerous surveys and reports. Prior to 1984, one person in ten routinely buckled up; today surveys indicate that approximately 48% of the driving public is buckled up.

This growing usage has resulted from an increased public awareness of the benefits of safety belts combined with the force of the law which was passed by the Unicameral in May, 1985. Safety belts are effective. Personal observations by law enforcement officers and emergency medical teams in Nebraska indicate dramatic decreases in severity of injuries and deaths.

These observations include crash victims who were fully belted and have remained in their cars when the doors were opened during an accident and have received no injury. Crash victims whose cars rolled over remained fully belted in their seats and escaped with either no injury or minor fractures. In some cases, the crash victims had to unbuckle themselves, unhurt, while they hung upside down in their over-turned vehicle. Victims who have been belted up were hit head-on and walked away with minor injuries. This, of course, is what is expected and mirrors results that have been demonstrated for over a decade in 33 other countries and a dozen other states.

It has been predicted that if the ultimate in usage were achieved, or 100%, 84 Nebraskans would be saved from death on our highways each year and there would be 6,000 fewer injuries.

How have physicians traditionally been involved in this safety issue? In the past, we have limited ourselves to counseling our patients; we have told them to avoid alcohol when driving, and to buckle up. Organized medicine, including the Nebraska Medical Association, has supported seat belt usage in the past, and the recently enacted mandatory safety belt law. Twenty-six Senators and Governor Kerrey listened to us and acted on behalf of public safety. We thank them.

What can we do now? The physician's role has always been one of individual therapy. I would suggest that we continue to expand that counseling role. Helpful information and brochures are available from the Department of Health and the Department of Motor Vehicles. Also, the Nebraska Sheriff's Association has a wonderful poster. It depicts a smashed car obviously involved in a devastating head-on collision. In bold letters under the picture, the poster states that the child who was restrained received no injuries, but the three other persons in the car were seriously injured. This poster belongs in the office of every physician dedicated to the promotion of public health and safety.

I would further suggest that we take a public stand for safety. Your waiting room is an appropriate place to display printed information. Make it available in your hospital also. Schedule a safety belt program for your PTA, civic club or church group. A slide and tape show is available for your use from Nebraska Traffic Safety Now, P.O. Box 95023, Lincoln, Nebraska 68509.

The editorial page is a wonderful opportunity frequently ignored. The page is often filled with the negative side of life . . . people angry and disappointed with one another and with their government. However, the editorial pages can also be a place for positive comments of the respected physician's opinion in his community. I suggest that we let the communities we serve know where we stand on this important issue.

Finally, as a member of Nebraska's medical profession, I'm proud of our past efforts in the use of our influence to promote public health and safety. I hope these suggestions will contribute to a continuation of that effort.

A Perspective on PTCA

DEEPAK M. GANGAHAR, M.D.*

WHEN Charles Dotter first reported percutaneous angioplasty of the iliac artery in 1964, not much attention was given to this new mode of treatment. It remained dormant for almost 15 years until 1977 when Gruentzig lifted it to a new horizon by introducing his balloon catheter for coronary artery disease. Since then hundreds of cardiac centers have adapted percutaneous transluminal angioplasty (PTCA) as another tool in the care of patients with coronary artery disease. It is esimated that in 1984, 85,000 PTCA's were performed in the United States.

In this issue of the Journal, Kiefer, et al, have described their surgical experience in patients in whom PTCA was unsuccessful. It is a well done study and is indeed timely. In 1984, they performed myocardial revascularization on 25 patients out of a total of 98 patients who underwent PTCA. There was no death or myocardial infarction in this subset of surgical patients. They conclude that patients with "significant stenosis of the left anterior descending artery, recent myocardial infarction, and two major coronary arteries with high-grade stenosis, were significantly associated with the need for emergency surgery."

We all are at a learning phase as it relates to PTCA. All the indications for PTCA are not clearly defined. What actually happens to the artery at the site of balloon dilatation soon after the procedure and weeks and months later is not fully understood. Over the last one year at Bryan Memorial Hospital, 159 PTCA's were performed and 19 patients (11.9%) came to surgery. In these 19 patients either PTCA was unsuccessful or complication resulted during the procedure. We feel that success and failure of PTCA, like any other mode of treatment, depends on the proper selection of patients. In my view, some of the broad criteria that are helpful in patient selection are the following: First, it is not the number of coronary arteries that are critically stenosed, but it is the amount of myocardial mass that is at risk which determines the success or complication rate of PTCA. Second, collateralization of the myocardium is a crucial factor. In a poorly collateralized heart, simple inflation of the balloon inside the coronary artery without any associated dissection of intima is sufficient to produce hemodynamic instability. Further, if the coronary artery gets totally occluded during PTCA in a patient with poorly collateralized heart, that patient will have a much higher chance of intraprocedural myocardial infarction and surgical risk. This is easy to understand if we know that the warm ischemia time of the isolated myocardial cell is only 20 minutes. Our personal experience and results from the Texas Heart Institute reflect that following a failed PTCA, if the patient is unstable, results are significantly worse if the patient is not on the cardiopulmonary bypass within 25 minutes from the time of occlusion of the coronary artery. Third, failure and complication rate of PTCA is much higher when one is dealing with "complex" atherosclerotic plaque versus simple discreet lesion. Fourth, patients with diffuse coronary artery disease are neither "ideal" candidates for coronary bypass surgery nor PTCA. But in these patients when drug therapy has failed, surgery is a better option than PTCA. Lastly, like any other technique, success and failure of PTCA is directly proportional to the experience and skill of the angioplastor.

---

*Address all correspondence to: Deepak M. Gangahar, M.D., 5440 South Street, Suite 1200, Lincoln, Nebraska 68506.

We all understand the need for complete myocardial revascularization and strive for that goal. The Mayo group[1] recently reported their incidence of recurrence of angina or the need for coronary artery bypass surgery following PTCA. Sixty-three percent of the patients who had incomplete revascularization with PTCA, compared to 29% who had complete revascularization with PTCA, developed recurrence of angina or required coronary artery bypass surgery. With PTCA the incidence of intraprocedural complication is 6 times higher in a female patient, but one year restenosis rate is 3 times higher in male than female patients.[2]

I believe PTCA is an excellent addition to the armamentarium in the care of the patient with coronary artery disease. Its incidence will continue to increase over the next few years until it finds its "real position" at which time the incidence will plateau. PTCA is being used more and more to abort the acute evolving myocardial infarction, in addition to being an elective procedure for chronic angina. We are now going through the second learning curve. We know that single, proximal and discreet atherosclerotic lesions can be dilated with low risk. Now patients with multi-vessel disease and complex lesions are being presented for PTCA. In these patients, I think, a decision should be made by comparing operative risk, long-term results and completeness of revascularization associated with coronary artery bypass surgery.

PTCA is not to be considered as an alternate to surgery, and definitely not as an alternate to drug therapy, but should be taken in complement to the existing modalities. It certainly has a lower morbidity compared to coronary bypass surgery, but if the recurrence rate, as is being reported from various centers, is 30%, then over the long haul, it probably is not as economical as initially perceived. At this stage what we need is a prospective randomized study to answer many complex questions regarding PTCA. As we know from a VA cooperative study and CASS study, such studies are expensive, time consuming and very difficult to coordinate. But that is the only way we can answer these difficult issues. Today PTCA should be taken as another good tool, not as a panacea, when used in properly selected patients and by experienced hands. We also should not lose sight of the fact that PTCA, just like bypass surgery, is a mechanical solution to a biochemical and systemic disease!

References

1. Mabin TA, Holmes DR, Smith HC, Vliestra RE, et al: Follow-up clincial results in patients undergoing percutaneous transluminal coronary angioplasty. **Circulation** 71:754, 1985.

2. Cowley MJ, Mullin SM, Kelsey SF, Kent KM, Gruentzig AR, et al: Sex differences in early and long-term results of coronary angioplasty in the NHLBI PTCA Registry. **Circulation** 71:90, 1985.

Short-term Results in Patients Requiring Myocardial Revascularization After Percutaneous Transluminal Coronary Angioplasty (PTCA)

PATRICK J. KIEFER, M.D.,
Resident, Department of Surgery
Creighton University, School of Medicine
Omaha, Nebraska 68131
LYNNE DUREN BARKMEIER, M.D.,
Resident, Department of Surgery
Creighton University, School of Medicine
Omaha, Nebraska 68131
RICHARD D. SCHULTZ, M.D.
Associate Professor of Surgery
Creighton University, School of Medicine
Omaha, Nebraska 68131
RICHARD J. FELDHAUS, M.D.,
Assistant Clinical Professor of Surgery
Creighton University, School of Medicine
Omaha, Nebraska 68131
DWAINE J. PEETZ, JR., M.D.,*
Assistant Professor of Surgery
Creighton University, School of Medicine
Omaha, Nebraska 68131

PERCUTANEOUS transluminal coronary angioplasty (PTCA) is being used more extensively for the treatment of coronary artery disease. As a consequence of unsuccessful PTCA, myocardial revascularization, either performed electively or urgently, has become increasingly necessary. This report reviews our 1984 experience with coronary artery bypass surgery performed after PTCA. The extent of coronary disease in this group of patients and their surgical results will be analyzed. Factors are identified that may be used to predict the need for emergent versus elective surgery after PTCA.

Methods

Patients who underwent PTCA and subsequent myocardial revascularization during 1984 were analyzed. The extent of their cardiac disease was assessed by examining the type of angina, presence or absence of a recent myocardial infarction (MI), and the degree of existing coronary artery disease. Unstable angina was defined as pain at rest or a recent change in the pattern of pain. MI was considered recent if it had occurred within six weeks. Diagnosis of infarction required significant cardiac enzyme elevations and new Q waves appearing on EKG. Coronary arteries were assessed by coronary arteriography and patients were classified as having single, double, or triple vessel disease, as defined by the Coronary Artery Surgery Study.[1] Stenosis of individual major arteries was also recorded.

PTCA was performed either on an elective or emergent basis. Indications for emergency PTCA included evolving MI or increasing chest pain. Surgery was classified as elective or emergent. Emergency surgery was defined as the need for revascularization because of continued myocardial ischemia manifested by angina or EKG changes of ischemia. This determination was made by both the surgeon and the angiographer. The elective surgical group was further divided into "successful PTCA" and "unsuccessful PTCA" groups. PTCA was considered successful if the diameter of the artery was increased by more than 20%. The time interval between PTCA and revascularization was noted.

Surgical outcome was examined in terms of the number of peri-operative MI's, major complications, and mortalities. An MI was considered perioperative if there was no evidence of myocardial damage before surgery and new Q waves appeared after surgery. Differences in variables between the elective and the emergency surgery groups were analyzed using the chi-square test.

*Reprint requests to: Dwaine J. Peetz, Jr., M.D., Assistant Professor Surgery, Creighton University, School of Medicine, Omaha, Nebraska 68131

Results

Myocardial revascularization was performed in 25 of 98 patients undergoing PTCA in 1984 for a surgical rate of 25.5%. One patient had PTCA in late 1983 and surgery in 1984 and, therefore, is included in this report. These 26 patients included 15 males and 11 females with an average age of 59 years. Ages ranged from 41 to 84 years and nine patients were over 65 (34.6%).

Emergency revascularization was performed in 13 patients with surgery done electively in 13. Indications for emergency surgery included continuing myocardial ischemia immediately after PTCA because of recurrent stenosis, failed dilatation, or complete occlusion.

All patients had preoperative angina. Angina was considered unstable in nine patients undergoing elective surgery (34.6%) and in only four patients undergoing emergency surgery (15.4%). Recent MI was noted in six patients (23%) in the emergency surgery group while only one elective patient (4%) had a recent infarct. Four patients had an infarct as a consequence of an elective PTCA and one patient had both a recent MI and an MI immediately after PTCA (Table 1).

Patients with single, double, and triple vessel coronary artery disease, as determined by angiography, were evenly distributed between the two groups as listed in Table II. The number of patients with significant (>70%) coronary artery stenosis is summarized in Table III. While all of the emergency and most of the elective surgery patients had significant left anterior descending (LAD) disease, stenosis of greater than 90% of the LAD was associated with 92% of emergency surgery patients as opposed to only 30% of the elective surgery patients ($p<0.01$).

Emergency PTCA was performed in seven patients. Five patients (38%) in the emergency surgery group had emergency PTCA as compared with two patients (15%) in the elective group. Three elective surgery patients had previous myocardial revascularization while only one patient had prior surgery in the emergency group.

Of the 13 elective surgeries performed, 11 preceding PTCA's were termed unsuccessful. The average time interval between unsuccessful PTCA and surgery was 18.3 days. There were five elective surgeries performed the day of PTCA. Two PTCA's were termed successful but restenosis necessitated elective surgery. The time intervals between PTCA and surgery were six and 39 days in these two patients.

Surgical outcomes are listed in Table IV. No perioperative MI's and no mortalities were reported. Nine patients had evolving infarction at the time of operation, five as a result of failed PTCA, and four who had unsuccessful PTCA attempted for evolving infarction secondary to their coronary artery disease.

TABLE I

CARDIAC STATUS

	ELECTIVE SURGERY	EMERGENT SURGERY	X^2
Stable Angina	4	9	N.S.
Unstable Angina	9	4	N.S.
Recent MI	1	6	$p< 0.01$
MI 2° PTCA	0	5	$p< 0.01$

TABLE II

CORONARY ARTERY DISEASE

	ELECTIVE SURGERY	EMERGENT SURGERY
Single Vessel	5	4
Double Vessel	7	7
Triple Vessel	1	2

Major complications included a pulmonary embolus in an emergency surgery patient and one patient who had a persistent coagulopathy required reoperation for postoperative hemorrhage. The length of the postoperative hospital stay was not significantly different between the two groups.

Discussion

Indications for PTCA have been growing. Ideal candidates for this procedure have a single, proximal, discrete stenosis of the LAD that is causing symptoms affecting their quality of life.[2] Recently, PTCA has been performed for patients with multivessel coronary disease [3] and total coronary artery occlusion.[4] Acute myocardial infarction has also been added to the list of indications for this procedure.[5,6]

With expanded use of PTCA, success rates of this procedure in more complex patients are below rates for more ideal candidates. With a predominance of single vessel lesions, the National Heart Lung Blood Institute PTCA registry reported a 6.6% emergency surgery rate. [7] Our higher 12.7% emergency surgery rate for 1984 compares favorably with Reul's 13.5% emergency rate in a comparable group of PTCA patients with more extensive coronary disease. [8] In our experience, patients undergoing emergency surgery after PTCA had a higher rate of double and triple vessel coronary artery disease (69%) as compared to patient enrolled in the NHLBI PTCA registry (23%).[3]

Myocardial revascularization can be successfully performed either in an emergent or elective situation. Mortality rates in the NHLBI PTCA registry were 6.4% for emergency surgery. [7] We had no deaths in either the emergent or elective group. No perioperative MI's were seen either. As noted, five patients who underwent elective angioplasty developed acute MI secondary to that procedure and emergency PTCA was performed for another three patients with evolving MI's. The amount of myocardium salvaged by emergent revascularization is inherently unknown but was felt to be significant in these patients.

Two major complications were encountered. A pulmonary embolus was seen in a 63 year old male who underwent emergent revascularization after elective PTCA. He recovered without incident. One patient required reoperation for postoperative bleeding.

Certain predictors of the need for emergency surgery were identified. All patients in

TABLE III

PERCENT CORONARY ARTERY STENOSIS

	ELECTIVE SURGERY	EMERGENT SURGERY	X^2
LAD 70%	8	13	N.S.
LAD 90%	4	12	$p < 0.01$
Major 100%	7	6	N.S.
2 Major 100%	1	1	N.S.
2 Major 90%	2	6	$p < 0.01$

TABLE IV

SURGICAL OUTCOME

	ELECTIVE SURGERY	EMERGENT SURGERY
Perioperative MI	0	0
Complications	1	1
Postoperative Length of Stay (Average)	11.5 days	13.2 days
Mortality	0	0

the emergent and the majority of patients in the elective surgery group had significant LAD disease. This is consistent with the finding that the LAD is the most commonly diseased artery in PTCA candidates.[7] But in our experience, patients needing emergency revascularization were more likely to have LAD stenosis greater than 90% as compared with patients undergoing elective surgery. The findings of two major coronary arteries with greater than 90% stenosis is also significantly associated with emergency surgery. These high grade stenoses in major arteries were more difficult to dilate. Failure to dilate these lesions resulted in a higher incidence of myocardial ischemia necessitating emergent revascularization.

Recent MI was also more frequent in the emergency surgery group. Five of six patients with recent MI's that were not secondary to PTCA all had LAD disease greater than 90%. Gender, age, type of angina, and the number of diseased coronary arteries were not significantly associated with the need for emergency surgery.

We have found that elective and emergent myocardial revascularization performed after PTCA can be done with a minimum of morbidity and mortality. As the indication for PTCA expands, so will the need for surgery in these patients.

Summary

Myocardial revascularization was performed in 26 patients during 1984 who had undergone a previous percutaneous transluminal coronary angioplasty (PTCA) within one year. The findings of significant stenosis of the left anterior descending artery, recent myocardial infarction, and two major coronary arteries with high grade stenoses were significantly associated with the need for emergent surgery. Two postoperative complications but no deaths were seen in these 26 patients. Myocardial revascularization after PTCA can be successfully performed either in emergent or in elective situations.

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Nontuberculous Mycobacteria: A Case Report and Review of the Literature

ROBERT A. MCLELLAN, M.D.
Assistant Professor, University of Nebraska Medical Center
RICHARD BELL, M.D.
Third Year House Officer, University of Nebraska Medical Center
PAUL M. PAULMAN, M.D.*
Assistant Professor, University of Nebraska Medical Center

NONTUBERCULOUS mycobacterial infection remains an obscure disease with confusion over the natural course, treatment, prognosis and diagnosis. Presented herein is a case report and review of the literature concerning nontuberculous mycobacterial infection.

Case Report

A 51 year old white female presented with a history of 3 weeks of cough, left sided pleuritic chest pain, and white sputum production. She had night sweats, but no fever or chills. She denied hemoptysis, shortness of breath, or paroxysmal nocturnal dyspnea. The patient worked at a nursing home and had a positive PPD 5 years earlier. She was not treated nor had she received a repeat chest x-ray since that time. Past history was significant for a 17 pack year history of cigarette smoking. Physical exam revealed a cachectic, pale white female with normal vital signs. There were some small palpable posterior cervical lymph nodes. Lungs revealed slight wheezing bilaterally with forced expiration. The rest of the exam was within normal limits. Chest x-ray revealed bilateral upper lobe and apical cavitary lesions. (Figure 1)

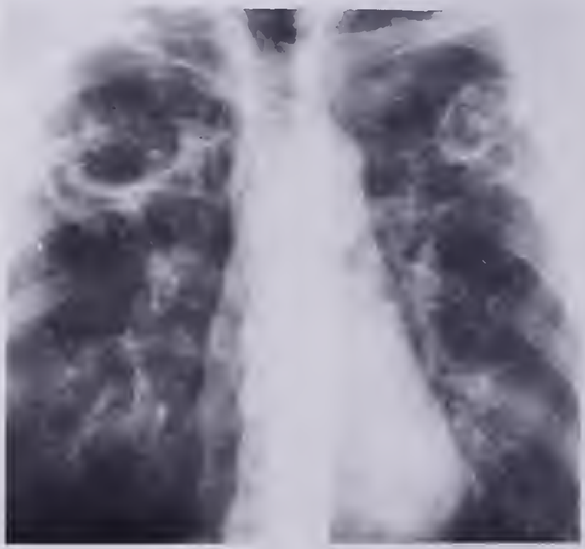
Admission CBC showed 7800 WBC's with 66 segs, 1 band, 24 lymphocytes, 6 monos, 2 eos, 1 basophil. Hemoglobin 9.2; electrolytes and chemistry profile were all within normal limits. Four sputum specimens from four separate days showed acid fast bacilli. There was no evidence of other organ involvement.

The patient was begun on Ethambutol 800 mgs daily, Isoniazid 300 mg daily, and Streptomycin 1 gm IM every other day. This was continued for 2 weeks on the presumption of active tuberculosis and patient was then discharged. Rifampin 600 mg daily was substituted for the Streptomycin when the patient was discharged. Cultures of her sputum at 4 weeks showed 6 separate isolates of Mycobacterium kansasii sensitive to Isoniazid, Streptomycin and Rifampin. At follow-up in three months she was doing well with no cough or diaphoresis noted.

Discussion

The whole topic of nontuberculous mycobacterial disease is confusing to most practitioners, mainly because so many unknowns exist about the disease and because so much attention has been focused on M. tuberculosis. This confusion is probably best illustrated by the fact that controversy still exists over the name of the disease. It has been known as nontuberculous mycobacterium, atypical mycobacterium, mycobacterium other than tu-

Figure 1 A



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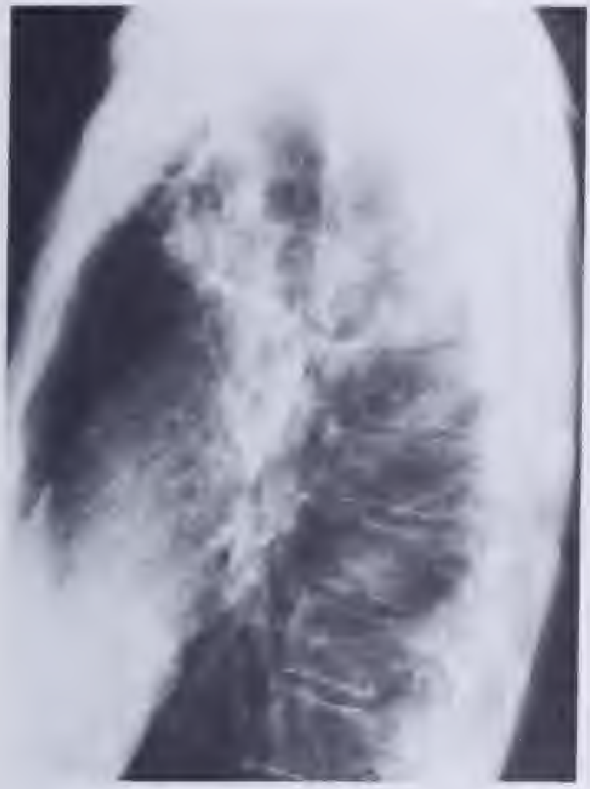
*All reprint requests should be addressed to Dr Paul Paulman, Department of Family Practice, University of Nebraska Medical Center, Omaha, Nebraska 68105.

Figure 1B



berculosis (MOTT), anonymous mycobacteria, as well as many others. We will use the term nontuberculous mycobacteria or NTM in this report.

With the prevalence of M. tuberculosis and the notoriety of M. leprae, the NTM have been relatively ignored until recently. Although isolated cases were described in the first half of the twentieth century, not until the 1950's did serious study of NTM occur.[1] Timpe and Runyon described the first working classification in 1954.[2] Since then more classification systems have been developed and more pathogens have been discovered (See Table 1).

These organisms are found in soil, water, fish tanks, laboratories, and other sites.[1,3,4] This can make the diagnosis somewhat difficult because the physician must differentiate contamination from colonization or true disease.

The incidence of NTM is variable depending on the location and the diagnostic criteria. M. avium-intracellulare-scrofulaceum appears to occur most commonly in the Southeastern U.S., western Australia, and Japan. In contrast

TABLE 1
Nontuberculous Mycobacteria (1, 3, 7, 9, 13, 14, 17, 18)

Pathogens	Growth	Response to Therapy	Runyon Class	Types of Infection
M. Kansasii	slow	good	I	pulmonary
M. Szulgai	slow	good	II	pulmonary
M. Xenopi	slow	good	II	pulmonary
M. Simiae	slow	poor	I	pulmonary
M. Marinum	slow	good	I	skin, wound
M. Avium[1]	slow	poor	III	pulmonary, cervical adenitis
M. Intracellulare[1]	slow	poor	III	pulmonary, cervical adenitis
M. Scrofulaceum[1]	slow	poor	II	pulmonary, cervical adenitis
M. Fortuitum[2]	fast	poor[3]	IV	skin, wound
M. Chelonei[2]	fast	poor[3]	IV	skin, wound
M. Ulcerans	slow	good	III	skin
Nonpathogens				
M. Gordonae	slow	NA	II	
M. Flavescens	slow	NA	II	
M. Terrae Complex	slow	NA	III	
M. Gastri	slow	NA	III	
M. Smegmatis	fast	NA	IV	
M. Phlei	fast	NA	IV	
M. Vaccae	fast	NA		
M. Parafortuitum Complex	fast	NA		

1. Also called the Mycobacterium avium - intracellulare - scofalaceum or MAIS complex.
2. Also called the M. fortuitum complex.
3. Poor response to AntiTB drugs - may respond to others (See Table II).

to this M. Kansasii has predominantly been found in Chicago, Kansas City, Texas, England, and Wales.

NTM makes up from 1 to 30% of all the mycobacterium isolated. In fact, one British Columbia study tried to calculate the risk of developing NTM. In the age group over 55 years, the chance of contracting NTM was 7.9/100,000 people. In the highest risk age group for tuberculosis, the chance of developing tuberculosis was 329/100,000 people.[6] This shows the rarity of this disease. Controversy remains at this time whether the incidence of NTM is increasing, remaining stable, or falsely increasing due to greater detection and awareness.[6]

Although the exact mechanism of the disease is unknown, there is a predilection for this disease to appear in already damaged lungs. Patients with previous tuberculosis, COPD, bronchiectasis, and scarring are at greater risk.[3,4] Probably NTM colonize these areas and then some patients progress to true disease. Those infections that develop in soft tissue are often related to trauma or surgery. Systemic disease is rarely seen and then usually in patients who are immuno-compromised.[7,8] Unlike tuberculosis, there is no evidence of person to person transmission.[1]

The course of the disease varies with the patient and the organism. M. kansasii, for example, usually is a slowly progressive, chronic disease, requiring treatment in almost all cases.[9,10] MAIS (Mycobacterium avium-intracellulare-Scrofalaceum) complex disease, however, may in most patients remain fairly stable for years. In some patients it progresses and causes more respiratory difficulty; these are the patients who may require treatment.[11, 12]

Because some of these diseases require 5 or 6 drug regimens, the natural course is very important. The amount of medication is extremely costly and has a high incidence of toxicity. Deciding which patients need medication is a complex issue for physicians, with no exact answers at this time.

Because these organisms are found as saprophytes throughout nature, the diagnosis of NTM disease is often confusing. Clincial signs and symptoms are nonspecific and extremely variable. Cough, sputum production malaise, weight loss, dyspnea, night sweats, and hemoptysis may all be seen.[13, 14] Some patients may have no symptoms yet have obvious chest x-ray findings. Again, in contrast to tuberculosis, skin testing is not useful due to poor specificity.[3.]

There has been some emphasis on x-ray presentation to try to distinguish tuberculosis from NTM. A study by Christensen, et. al., showed that both types of organisms had a tendency to produce cavitary lesions in the posterior aspect of the upper lobes. Tuberculosis had a greater incidence of empyema and pleural effusions. However, there was no specific radiologic finding to distinguish NTM from tuberculosis.[15.]

At this time final diagnosis must come from cultures and even then there is controversy. The finding of one sputum culture or wound culture with NTM must be viewed with some skepticism. The only time a single positive culture would be significant is if it were obtained from a usually sterile area: pleural effusion, ascites, lung or liver biopsies, etc. However, repeated cultures which produce the same organism are diagnostic. Some authors state three morning specimens are sufficient for diagnosis; others state as many as eight are necessary.[1, 16]

The following criteria are a distillation of several authors' ideas and represent a fairly practical method of diagnosing NTM pulmonary disease:[3,4, 16]

1) Clinical signs and symptoms of either tuberculous or NTM disease: These patients often have pre-existing lung disease such as previous tuberculosis, COPD, scarring, etc. Other causes, such as tuberculosis, carcinoma, fungal disease, etc., have been ruled out.

2) Chest x-ray findings consistent with tuberculous or NTM disease: Especially significant are cavitary lesions.

3) Repeated sputum cultures (3 or 4) which show the same organism or positive culture of a normally sterile area.

If the patient presents with equivocal findings, the patient often has the diagnosis made on follow-up exams. After treatment is begun, the organism usually does not disappear from the sputum for 1-2 months in true NTM disease. Those patients who are merely colonized often have rapid disappearance of the NTM from their sputum.[16]

Because the most common presentation seen with NTM is pulmonary disease, we have not discussed the nonpulmonary forms. As knowledge of these organisms grow and as physicians become more aware, other sites of infection are seen. For example, M. fortiutum complex often causes soft tissue infections. These can occur post-operatively or through trauma to the skin. M. marinum often gives extremity soft tissue infections, from trauma associated with stagnant ponds or fish tanks. There are some reports of osteomyelitis, CNS infections and renal disease in the literature, but these are fairly rare occurrences.[1, 7] Disseminated disease appears almost exclusively in transplant patients, AIDS patients, chemotherapy patients, and others who are immuno-suppressed.

There is one syndrome seen specifically in pediatric patients up to the age of approximately 10-12 years. In this age group cervical adenitis more commonly is caused by NTM than tuberculosis, the exact opposite of the situation in adults. Of those patients with NTM lymphadenopathy, almost 60% occur in the 1-3 year old age group.[17, 18] Some of the NTM are responsive to therapy (Table 1). However, this usually means multiple drug therapy-in some cases, 5 to 6 drugs at the same time. (See Table II). For example, M. kansasii responds fairly well to a regimen of Rifampin, Isoniazid and Ethambutol. Streptomycin is an alternative drug used only if toxicity develops in one of the original drugs, or if the patient does not respond.[8, 9, 19] M. marinum responds to the same drugs, but also to some traditional antibiotics: trimethoprim-sulfamethoxazole, tetracycline, and minocycline.[19.]

However, MAIS complex disease is notoriously resistant to any therapy. Because of this, most authors suggest merely observation of the patient and reserving treatment for those patients who are progressing in their disease, usually found by increased x-ray findings. This complex responds well to 5 or 6 drug regimens with sputums becoming negative in about 80% of the cases. However, a significant number of these cases (20-30%)[8, 11, 12] relapse over the next 5 years. There is no way to identify those patients who have nonprogressive disease vs. progressive disease other than to be followed frequently with chest x-rays.

M. fortuitum complex disease has gained more attention as a wound and skin pathogen. It has a relatively fast growth rate and has caused sternal wound infections, abdominal wound infections, and others. It can respond in some cases to antibiotics such as amikacin, doxycycline, sulfamethoxazole and third generation cephalosporins. Surgery, with the excision of the involved area, is a very helpful adjunct. Like the MAIS complex disease, it is resistant to most antimycobacterial drugs.[1, 4, 19]

For follow-up, most of these patients need frequent chest x-rays or wound inspections to

TABLE II
Therapy of NTM[4, 8, 12, 19]

Pathogen	Medication + [Alternatives]	Duration
M. Kansasii	1, 2, 3, [4]	24 mo.with 6 mo. of negative cultures
M. Marinum	2, 3, [6, 7, 8]	
M. Szulgai	1, 2, 3, [4, 5]	18-24 months
M. Xenopi		
MAIS complex	1, 2*, 3, 4, 5, [11]	18-24 months
M. Simiae	1, 2, 3, 4, 5, [11]	
M. Fortuitum complex	[6, 9, 10, 12]	

1) INH 300 mg/day
2) Rifampin 600 mg/day-*some authors prefer to reserve this drug for relapse patients.
3.) Ethambutol 15 mg/kg/day
4) Streptomycin 1 gm/day x 1 month, 1 gm twice a week following that, IM.
5) Pyrazinamide 15-30 mg/kg up to max of 2 gm/day.
6) Trimethoprim - Sulfamethoxazole
7) Minocycline
8) Tetracycline
9) Doxycycline
10) Amikacin
11) Cycloserine 250 mg - 500 mg BID.
12) 3rd generation cephalosporins

insure adequacy of treatment and/or progression of the disease (chest x-rays may be obtained as often as every 3-6 months initially). Sputum should be obtained every 1-2 months initially to insure adequate therapy.[16] The sensitivities obtained with the cultures can be helpful; however, the bacteriacidal levels obtained with in vitro testing are not always obtained in patients. These sensitivities are merely a guide and not as accurate as routine antimicrobial sensistivities. The specific anti-mycobacterial drugs have their own special toxities, which must be monitored appropriately.

Summary

NTM, although a fairly rare disease, has become increasingly recognized as a cause of pulmonary and wound infections. Much still needs to be done in the study of its pathogenesis and course. Continued research is needed for new medications, especially for resistant organisms. Physicians need to be aware of this disease so diagnosis and treatment is not delayed.

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The Twenty-five Most Common Multiple Congenital Anomaly Syndromes in Nebraska

PAUL L. JACOBSEN
ANN HASKINS OLNEY, M.D.
WARREN G. SANGER, Ph.D.
BRUCE A. BUEHLER, M.D.
Center for Human Genetics
University of Nebraska Medical Center
Omaha, Nebraska

IN an attempt to inform clinicians about the twenty-five most common multiple congenital anomaly syndromes, we have summarized the most frequent syndromes seen through the Center for Human Genetics at the University of Nebraska Medical Center. Our study was modeled after the work of Dr. Bryan D. Hall at the University of San Francisco Genetic Service from 1970 through 1980.[1]

Multiple congenital anomaly (MCA) syndromes are present at birth and originate during gametogenesis or during fetal development. These syndromes can be diagnosed through recognition of a pattern of malformations representative for each individual syndrome. In many cases, a chromosome analysis is performed, a biochemical analysis is conducted, and/or a pedigree obtained in order to confirm or rule out a particular diagnosis.

Materials And Methods

The data for this study were obtained from a review of files of patients referred to the Center for Human Genetics at the University of Nebraska Medical Center and patients seen at satellite genetics clinics from July 1, 1979 through July 1, 1985. The twenty-five most common MCA syndromes were then determined and grouped on the basis of etiology and the level of developmental disabilities. Syndromes present in fewer than four cases during this period are not included.

Results

The results of this study are presented in tables I, II, and III. Table I lists the 25 most common MCA syndromes seen at the Center for Human Genetics. This list does not include multiple anomaly syndromes commonly diagnosed during adolescence or adulthood. Klinefelter syndrome (21 cases), Neurofibromatosis (20 cases), and Osteogenesis imperfectatarda (7 cases) were the only syndromes appearing in four or more cases that would not commonly be detected until adolescence or adulthood. The number of cases of these syndromes may therefore be underrepresented in our population.

Table II groups the 25 syndromes according to the presence or absence of developmental delays. The known etiologies of the syndromes are summarized in Table III.

Discussion

The diagnosis of any malformation syndrome can be difficult due to the variability of expression among individuals and families. With rapidly increasing knowledge relevant to morphogenesis, syndrome identification over the last few years has improved, allowing for a greater number of cases to be ascertained and diagnosed.

Chromosome abnormalities are the most common cause of malformation syndromes seen at the Genetics Center, accounting for the four most common syndromes and 62% of the cases among the 25 syndromes. This frequency of chromosome abnormalities may be somewhat biased because the cytogenetics laboratory is associated with the Center for Human Genetics.

Down syndrome accounts for 43% of the total cases presented in Table I, with an average of 35 cases per year. This syndrome is usually caused by trisomy of chromosome 21 but can also be due to an unbalanced

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*Address for reprint requests: Ann Haskins Olney, M.D. Center for Human Genetics, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68105

TABLE I

Twenty-five Most Common Multiple Congenital Anomaly Syndromes in Nebraska

		FISCAL YEAR							
		'80	'81	'82	'83	'84	'85	Total	Etiology
1.	Down	34	37	39	32	33	31	206	Chromosomal
2.	Turner	7	6	12	6	6	5	42	Chromosomal
3.	Trisomy 18 (Edwards)	8	10	5	2	7	5	37	Chromosomal
4.	Trisomy 13 (Patau)	–	3	5	4	4	2	18	Chromosomal
5.	Potter Anomaly	1	–	2	4	4	6	17	Unknown
6.	Fetal Alcohol	–	–	2	–	8	6	16	Drug
7.	VATER	1	–	3	7	3	1	15	Unknown
8.	Noonan	–	1	1	2	5	6	15	Single gene (AD)*
9.	Prader-Willi	4	2	1	3	1	3	14	Unknown
10.	Hemifacial Microsomia	–	1	2	3	3	3	12	Unknown
11.	Amniotic Bands	1	–	3	1	–	5	10	Unknown
12.	Beckwith-Wiedemann	–	1	5	–	–	3	9	Unknown
13.	Williams	–	–	1	3	4	1	9	Unknown
14.	**Fragile-X**	–	1	1	1	4	1	8	X-Linked
15.	Ehlers-Danlos	–	1	2	1	2	1	7	Single gene (AD)
16.	Fetal Dilantin	–	–	–	3	2	2	7	Drug
17.	Pierre Robin	4	–	–	–	1	2	7	Unknown
18.	Stickler	–	–	2	3	–	2	7	Single gene (AD)
19.	Aarskog	–	1	1	2	1	1	6	X-Linked semidominant
20.	Marfan	–	2	2	–	2	–	6	Single gene (AD)
21.	Choanal atresia/MCA	1	1	1	–	1	–	4	Unknown
22.	Crouzon	–	1	–	–	1	2	4	Single gene (AD)
23.	**Rubinstein-Taybi**	–	–	–	3	1	–	4	Unknown
24.	Russell-Silver	–	2	–	1	–	1	4	Unknown
25.	Waardenburg	–	–	–	2	1	1	4	Single gene (AD)
	TOTAL	61	70	90	83	94	90	488	

* Autosomal Dominant

translocation, which was found in 7% of our cases. This compares with a 3-5% frequency of translocation Down syndrome reported in the literature.[2,3]

Syndromes commonly seen in Nebraska that did not appear in the San Francisco study include: Beckwith-Wiedemann, Fragile-X (a syndrome only delineated in the last 5 years), Stickler, Aarskog, Crouzon and Waardenburg syndromes.

The association of syndromes and developmental delays is extremely important to the clinician although not all children with an MCA syndrome are developmentally delayed. Identification and early intervention are important for all children with an MCA syndrome, both for those with normal mentation and those with possible developmental delays, so that all may achieve their maximum developmental potentials.

For further elucidation of the syndromes presented in this paper, the authors recommend **Recognizable Patterns of Human Malformation,** 1982, by David W. Smith.

TABLE II

Occurrence of Developmental Delays Among the Twenty-five Most Common Multiple Congenital Anomaly Syndromes

Frequent Developmental Delay	Occasional Developmental Delay	Rare Developmental Delay
Down	Turner	Potter
Trisomy 18	Fetal Alcohol	VATER
Trisomy 13	Noonan	Ehlers-Danlos
Prader-Willi	Hemifacial Microsomia	**Pierre Robin**
Williams	Amniotic Bands	Marfan
Fragile-X	Beckwith-Wiedemann	Russell-Silver
Fetal Dilantin	Stickler	Waardenburg
Choanal Atresia/MCA	Aarskog	
Rubinstein-Taybi	Crouzon	

TABLE III

Etiologies of Cases from the Twenty-five Most Common Multiple Congenital Anomaly Syndromes

Etiologies	Number of Cases	Percentage
Chromosomal	303	62.1%
Unknown	105	21.5%
Single gene (AD)	43	8.8%
Drug	23	4.7%
X-linked	14	2.9%
TOTAL	488	

Summary

This paper provides a list of the most common MCA syndromes seen in Nebraska. It is hoped that this compilation will serve as a source of information for physicians in Nebraska.

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Pediatric Gastroenteritis Associated with Aeromonas sobria and Campylobacter jejuni

HELEN SINH DANG, M.D.
Department of Pediatrics, Creighton University School of Medicine, Omaha, Nebraska 68178
RICHARD B. CLARK, Ph.D*
FLOYD C. KNOOP, Ph.D
KATHLEEN M. SHUCK, M.S.
LAUREEN K. KIMURA, BSMT
Department of Medical Microbiology, Creighton University School of Medicine, 2500 California Street, Omaha, Nebraska 68178

MEMBERS of the bacterial genera **Aeromonas** and **Campylobacter** have recently been implicated as major etiologic agents of bacterial gastroenteritis (GE). Both organisms have been associated with a spectrum of disease ranging from a mild self-limiting GE to a more severe invasive GE similar in symptomology (blood, mucus and inflammatory exudate) to **Shigella** infections.[1, 2, 3, 4] Three aeromonas species (**A. sobria, A. hydrophila,** and **A. caviae**) may be recovered from human clinical specimens. Recent clinical evidence indicates that **A. sobria** and **A. hydrophila** are the most virulent and invasive aeromonads, accounting for approximately 90% of bacteremic episodes in humans.[7] Both **A. sobria** and **A. hydrophila** have been implicated as primary etiologic agents in human GE, whereas the status of **A. caviae** in producing GE is uncertain.[5,7,8] The leading cause of human GE among the campylobacter infections is **C. jejuni** (95-97% of all campylobacter GE) with **C. coli** accounting for the remaining 3-5% of the diarrheas.[9] To our knowledge, this case study describes the first reported simultaneous recovery of **A. sobria** and **C. jejuni** from the stool specimen of a pediatric patient with GE. The data suggest that both etiologic agents may have contributed to the disease process.

Case Report

In July, 1984, an 8-month-old white female presented to the Creighton University Pediatric Clinic with a 4-day history of GE. Her mother remarked that the infant had watery stools on the first day of symptomatic disease, and that they became mucoid and blood-speckled by the following day. At the time of presentation the infant was passing approximately 8 stools per day and had periodic episodes of vomiting. The infant was afebrile and her electrolytes, BUN, and creatinine were within normal limits. Dehydration may have been prevented by the mother force feeding liquids.

Epidemiologic questioning revealed that the family lived in a small rural community (population 310) that had been recently flooded. The town was served by a common water well, although it was not certain whether the water supply had been affected by the flooding. No other family member had a recent history of GE or any other illness. A stool specimen was carefully collected (at the time of presentation) from the infant and observed to be greenish and mucoid; laboratory testing revealed the presence of occult blood and white blood cells (WBCs). A portion of the stool was cultured for enteric pathogens by established protocols[10] (including yersinia and campylobacter) on standard media including blood agar. On day 2 post-inoculation, an isolate presumed to be **C. jejuni** (gram negative spiral shaped bacillus) was recovered in moderate numbers from the stool specimen. The infant was immediately placed on erythromycin therapy (for an apparent campylobacter GE), and her diarrheal symptoms rapidly improved within 2 days of antibiotic treatment. The disease completely resolved after 1 week of antibiotic therapy. A beta-hemolytic gram-negative bacillus (spot oxidase and indole positive) was also noted on the blood agar plate in moderate numbers. Biochemical characterization of the isolate by the API 20E system (Analytab Products, Plainview Long Island, NY) revealed the identity to be **A. hydrophila** (code number 3247125); the API 20E does not speciate within the **A. hydrophila** complex. By disk diffusion, the aeromonad had an intermediate sensitivity to erythromycin. No other enteric pathogens were isolated. A supplemental biochemical test panel recommended by Janda et al.[7] further identified the aeromonad as **A. sobria.** The organism produced acetyl methyl carbinol in the Voges-Proskauer test, grew in the presence of citrate as the sole carbon source, and produced arginine dihydrolase, lysine decarboxylase, and gas from glucose. The organism lacked ornithine decarboxylase activity. Sugars fermented by the aeromonad were mannitol, glucose, sucrose and amygdalin, whereas inositol, sorbitol, rhamnose, melibiose, arabinose and salicin were negative. The campylobacter isolate was definitively identified as **C. jejuni** on the basis of positive tests of oxidase, catalase, hippurate, and growth at 42°C. The isolates of **A. sobria** and **C. jejuni** were tested for cytotoxin production in Y_1 adrenal cells by established methods.[11] Only the **A. sobria** culture supernatant produced a visible cytotoxic effect on the cultured adrenal cells.

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*Address for Reprints: Richard B. Clark, Ph.D., Department of Medical Microbiology, Creighton University School of Medicine, 2500 California Street, Omaha, Nebraska 68178, (402) 449 4953.

Discussion

Laboratory and clinical data from this case report suggest that both **A. sobria** and **C. jejuni** were the etiologic agents producing GE in this pediatric patient. These organisms were recovered simultaneously in moderate numbers from the stool specimen; no other known bacterial pathogens could be detected. The presence of both blood and WBCs in the stool indicated the occurrence of an invasive diarrheal disease similar to the classic intestinal invasion produced by **Shigella** infections. Both aeromonads and campylobacters have been previously implicated as etiologic agents of an invasive diarrheal process.[4,6] Furthermore, **A. sobria** has a known propensity to produce septicemia in the immunocompromised or cirrhotic patient, a result associated with host invasion of the gastrointestinal tract.[7] Though blood cultures were not drawn, both organisms may have initially produced a transient bacteremia, a condition known to occur in pediatric patients with **Salmonella** GE.[12] The role of erythromycin therapy in altering the natural course of infection in this patient is unknown since most aeromonad and campylobacter GEs resolve spontaneously in the absence of antibiotic intervention.[1,3,5,13]

The production of a bacterial enterotoxin may have contributed to the diarrheal disease process in this patient. The initial clinical symptoms (first day) indicated a watery or "cholera-like" diarrheal disease that has been previously described for **A. sobria** GE.[8] Indeed, the **A. sobria** isolate described here produced a cytotoxin as shown by tissue culture assay and in vitro testing (hemolysin and VP tests positive) indicated that this organism formed an enterotoxin.[14] The simultaneous occurrence of both an enteroinvasive (both campylobacter and aeromonas) and enterotoxigenic (aeromonas only) GE cannot be ruled out in this patient.

The occurrence of GE in this 8-month-old pediatric patient during the month of July is consistent with other studies that demonstrate the highest incidence of aeromonad and campylobacter diarrheal disease in the summer months and in this particular age group, 6-12 months to 4-5 years.[2,15] Flooding in the home region of the patient may have aided the spread of both organisms and contributed to the GE since aeromonads are known aquatic organisms[16] and at least one waterborne outbreak of campylobacter GE has been described.[17] It is not known whether the well water consumed by the patient was contaminated with either one or both of these organisms.

This case report emphasizes the need for clinicians to consider the disease producing potential of aeromonads. Screening stool specimens by established methods will usually detect the more well described enteric pathogens such as **Campylobacter;** however, these standard procedures may not always detect **Aeromonas** species. Clinical microbiology laboratories should screen stool specimens for beta-hemolytic aeromonads as demonstrated here with blood agar, since usually only the enterotoxigenic **Aeromonas** species produce a beta-hemolysin.[13] Further work is requried to determine the incidence of dual infections with **Aeromonas** species and other enteric pathogens, including **Campylobacter.**

Summary

A case of pediatric gastroenteritis associated with both **Aeromonas sobria** and

Campylobacter jejuni is described. The patient, an eight-month-old infant, had an invasive diarrheal process indicated by the presence of occult blood and fecal leukocytes. Flooding in the home region of the patient may have contaminated the water supply and caused the spread of these organisms. Clincal microbiology laboratories should screen stool specimens for both campylobacter and aeromonas species, since dual infection by these enteric organisms may not be uncommon. The production of beta-hemolysin by aeromonads is known to correlate with enterotoxin production and thus induction of enteric disease.

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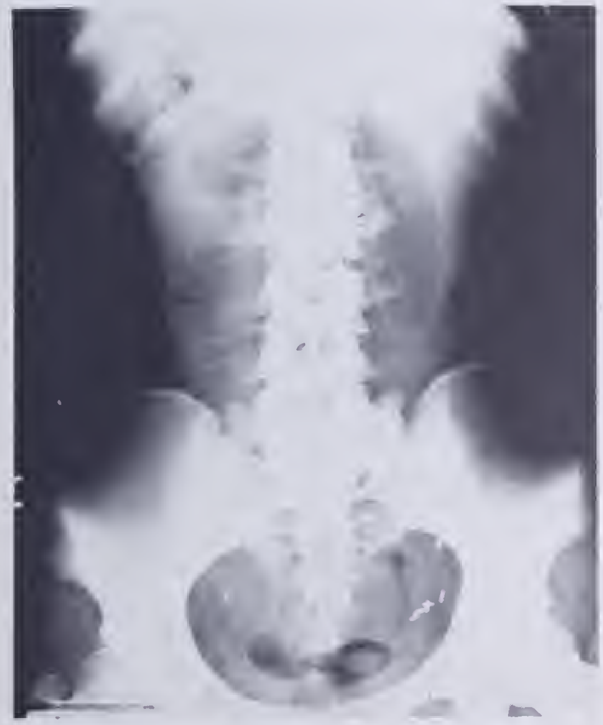
X-RAY OF THE MONTH

Abdominal Roentgenographic Findings in Acute Pancreatitis

RUS ASLESON, M.D.
University of Nebraska Medical Center, Omaha, Nebraska
JAMES J. PHALEN, M.D.
Veterans Administration, Medical Center, Omaha, Nebraska

THIS 36 year old woman of Korean descent entered the hospital complaining of intense abdominal pain of 12 hours duration associated with nausea and intermittent vomiting. Past history was non-contributory except for a previous "radical" hysterectomy six years earlier. Routine lab including a pancreaticobiliary screen was essentially non-contributory. A urine screen for pancreatic enzymes was pending. An abdominal supine radiograph shows as the significant finding a single dilated loop of proximal small bowel (figure 1).



Discussion

Inflammation of peripancreatic tissues and mesentery adjacent to the pancreas occurs as pancreatic enzymes are extravasated in acute pancreatitis. Multiple abdominal roentogenogram findings are produced, most of which are non-specific.

The most common findings are bowel gas pattern abnormalities. The "sentinal loop" or localized small bowel ileus in the left upper quadrant (figure 1) is a common finding seen in 10-55% of patients with acute pancreatitis.[1]. A single air filled dilated loop of jejunum or duodenum may be seen with or without fluid levels. The sentinel loop may also be seen in a variety of other abdominal disorders including peptic ulcer disease and pyelonephritis. Gastric dilatation with fluid levels may accompany duodenal atony.[2]

The colon may be affected in acute pancreatitis secondary to spread of the inflammatory process into the transverse mesocolon and phrenicocolic ligament. The "colon cut-off" sign has had various descriptions, but the most frequently used now is dilatation of the transverse colon terminating abruptly at the splenic flexure with relative paucity of gas in the colon distal to the splenic flexure. While dilatation of the transverse colon or flexures is relatively frequent in acute pancreatitis, it is non-specific.[3] Rarely inflammation will migrate via the mesenteric route to involve the cecum and terminal ileum. A gasless abdomen is also possible particularly in patients with persistent vomiting.

"Renal halo" sign is a recently described finding in patients with acute pancreatitis.[4] A radiolucent halo is seen surrounding the left kidney which is apparently the result of density differences between the perirenal fat and overlying pancreatic exudate in the left anterior pararenal space. This finding has been correlated with the frequent computed tomography finding of effusion in the left anterior pararenal space. Loss of the left renal outline and absence of the left psoas shadow are other non-specific findings.

Extravasation of pancreatic enzymes can cause fat necrosis within the pancreas and peripancreatic tissues. This finding is a rare, but rather specific sign for acute pancreatitis and usually indicates poor prognosis. Gas in a pancreatic abscess is another rare but probably pathognomonic sign of acute pancreatitits.[2]

A soft tissue mass in the area of the pancreas, separation of the gastric and transverse colon lucencies, and ascites are other uncommon non-specific findings. Manifestations of associated biliary tract disease including cholelithiasis, biliary tract air, and visible gallbladder were present in 10% of one series.[1] Pancreatic calcifications are indicative of chronic, recurrent disease.

Ultrasound has been the modality of choice for evaluating acute pancreatitis, specifically with respect to the detection of complications and confirmation of uncertain clinical diagnoses. Associated biliary tract disease is also evaluated. Computed tomography adds additional information in the evaluation of complications.

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President's Page

MORE ABOUT PROFESSIONAL LIABILITY

The economics of health care in the form of cost control has grown to gargantuan proportions in recent years and has as one of its byproducts a marked intrusion into the medical liability field, which already was in a state of crisis. Jurors may be strong advocates of cost reduction but it's highly doubtful they will look with favor on medical decisions influenced by economics in lieu of those derived from sound standards of quality care.

Reimbursement for Medicare patients is now in vogue, the Prospective Payment System (PPS), permits hospitals to make a profit only if the costs are below the allocated fee corresponding to one of the 470 diagnosis related groups (DRG). For a hospital to be successful financially, the DRG game must be played out by influencing physicians to admit, transfer, or discharge patients with a sharp eye on the economic factors involved. This presents frequent conflicts between sound medical and economic decisions. As each DRG corresponds to a different rate of reimbursement, physicians should resist any influence to manipulate a primary diagnosis to maximize reimbursement. This would be patently fraudulent. The potential for conflict is great in this juggling act buy any act later alleged to be malpractice could introduce further problems as decisions influenced by economics will get no sympathy in court. The same applies to any manipulation of the factors of severity of illness. Again conflicts are evident between economic and sound medical decisions, but the spector of liability litigation could further complicate the problem.

Defensive medicine has practically become a part of standard medical practice. However, the DRG game does not recognize this and will at times refuse payment for tests and procedures not deemed essential. Courts on the other hand practically demand the use of all available tools in diagnosis and treatment. Over utilization and under utilization are both factors that can influence medical decisions.

Francis D. Donahue, M.D.

The new health center delivery systems, if to be successful, depend on strict adherence to their concept of "medical necessity". This term is the product of balancing medical and economic factors. Reconciling the proper standard of quality care with medical necessity can be very difficult at times for physicians. We invite problems for a prepayment system like H.M.O.'s, etc. by not adhering to their strict rules on admission, length of stay, use of consultants, or use of lab or x-ray exams which the organization feels are not consistent with their concept of medical necessity. At the same time courts will show no tolerance for any decision influenced by cost control alone in spite of the pressures placed on the physician to comply.

The escalating cost of health care indeed needs control, but more importantly our precious standards of quality of care and ethics should be our guide, not the government, private organizations or courts.

We are attempting to accommodate the factor of economics and good medicine but fnd it further complicated by the element of medical liability.

Francis D. Donahue, M.D.
President

The Auxiliary

IT'S A FACT . . . The AMA Auxiliary works for you, your Physician-Spouse, and your community.

HEALTH

My theme of "HEALTH FOR THE WHOLE FAMILY" is being carried out in Nebraska, and throughout the nation. Last year more than 5,300 community health projects were promoted by the AMA Auxiliary. Here are some facts to show what 80,000 auxiliary volunteers did:

582 programs for older Americans
509 programs for children and youth (including child abuse prevention)
313 family life programs (pre and post natal care, parenting)
671 health careers programs
2,123 health education/service programs (CPR, immunization etc.)
163 international health programs (equipment collection and financial)
174 mental health programs (stress management, suicide prevention)
517 safety programs (cars, drinking and driving, poison etc.)
273 screening programs (cancer, hypertension, scoliosis, learning dis.)

FINANCES

The AMA Auxiliary has contributed $40 million to the AMA Education and Research Foundation since 1957. Nearly $1 million in health careers scholarships and loans has been given to more than 3,500 young people nationwide by state and county auxiliaries.

LEGISLATIVE

The AMA Auxiliary provides a vehicle for a unified voice in health and medical legislation. Thirty-seven states have Legislative Alert Systems to enable members to respond quickly to issues. Project Medvote is a program of the AMA and AMA Auxiliary organized in 1984 to encourage physicians and their spouses to register and vote. The AMA Auxiliary provides Legislative Alerts, updates on legislative issues and bills, and educational materials for members through the National Legislation Committee.

Ardis Grace

COMMUNICATION

Facets magazine is sent 8 times a year to 80,000 auxilians. Incidently, did you see the article about Nebraska on page 11 of the January 1986 issue? Direct Line Newsletter is sent six times a year to 8,000 county and state auxiliary leaders. Horizons Newsletter is sent 6 times a year to 3,000 resident physician and medical student spouses. Our National AMA Auxiliary President, Mary Kay McPhee, would like very much for auxilians to order extra copies of Facets to be put in waiting rooms at clinics and hospitals. It is our only way of letting people know what auxilians do.

* * *

It's a fact. The AMA Auxiliary is a vast network of volunteers that help to bring a better quality of life to all people through its health programs and projects and its legislative efforts. And if you cannot always remain an "active" member, remain an informed member. Support the AMA Auxiliary with your dues.

Make plans to attend the annual meeting at the Marriott Hotel in Omaha April 25-28, 1986. The business meeting is Friday morning with an educational symposium following lunch. The brunch will be at the Omaha Country Club Saturday morning. Watch for exact details.

Mrs. Leslie Grace
NMAA President

LANCASTER COUNTY MEDICAL AUXILIARY TO SPONSOR SEMINAR

Lancaster County Medical Auxiliary will be sponsoring the seminar, AGING: IT'S HUMAN NATURE, on Saturday April 6, 1986 at the Southeast Community College Campus in Lincoln, Nebraska.

This seminar offers a comprehensive look at aging as a natural and dynamic process. Topics presented by resource persons will enable the participant to better understand "growing older" in terms of self, family and community. The purpose of this seminar is to develop an awareness of aging. It is for all of us to cope with, plan for and become enriched by our daily living.

In addition to the topics presented by resource persons, the participant will be able to visit with 14 representatives from various community service agencies. Participants can earn .6 CEU's.

AGING: IT'S HUMAN NATURE

8:30- 9:00 Registration, coffee and view exhibits

9:00- 9:45 The Aging Process: What is it? Rose Faithe, M.D.

9:45- 10:30 Independent Living versus Dependent: How to Choose your Lifestyle. Helen Boosalis

10:30-11:00 Coffee and Community Service Displays

11:00-12:00 Workshops: Choose either A, B or C
- A. Abuse of the Elderly, Elaine Ostdiak, Pat Hajny and The Older Person on the Streets of Lincoln, Steve Janovec
- B. Nutritional Needs, Sally Semm, M.S., R.D. and Medication — It's Effect on the Elderly, James Fosnaugh, M.D.
- C. Elder Hostels — A New Social Activity Sue Fraham, M.D.

12:00- 1:00 Lunch Break, Community Service Displays

1:00- 1:45 COPING WITH AGING: As seen by the Individual, Spouse and family, Bridget Cannon-Nifoussi, M.S.

1:45- 2:30 Concurrent Topics, Choose one A or B
- A. Alzheimer's and Related Disorders, David Smith, M.D. or
- B. Osteoporosis, Alan Jacobs, M.D.

2:30- 3:00 Coffee and Community Service Displays

3:00- 4:00 Health Care Cost Panel: Medicare and Insurance, Paul Liewer; Medical Care, Herbert Reese, M.D.; Hospitalization, Arlan Stromberg; Blue Cross and Blue Shield, Roger Mason, M.D.

Registration Information:
Adult Education Department
Southeast Community College
84th and O Street
Lincoln, Nebraska 68505
402-471-3333

LETTER TO THE EDITOR

I thank Dr. Lacy for his comments about our article, "Current Trends in Hypospadias Repair".

Our article outlined only our most recent experience since I have returned from sabbatical. It was a great pleasure to refine my hypospadias experience with the man who invented the MAGPI procedure, Dr. John Duckett (I spent my sabbatical year with Dr. Duckett and Dr. King). During the year, I saw or did 3-5 hypospadias repairs weekly.

I would like to point out, however, that a one stage vascularized graft is the technique utilized for the more proximal types of hypospadias at both Duke and The Philadelphia Children's Hospital. This technique is likewise utilized at the Children's Hospital of Chicago (Firlit), the Hospital for Sick Children at Great Ormond Street in London (Ransley), and the Washington Children's Hospital (Bellman). Stage procedures are rarely necessary today, even in the re-do's and certainly not for the first operation, as vascularized grafts and vascularized flaps can repair most forms of hypospadias.

Nursing care is minimal, in that our patients are discharged the same or the following day in all hypospadias operations, often with the only form of diversion being the urethral stent draining into a special diaper.

The experts named above have concluded that prudence dictates the use of a one-stage vascularized graft procedure, as it is safer to utilize nonscarred skin in a technique requiring one anesthetic.

Sincerely yours,
Francis F. Bartone, M.D., F.A.C.S., F.A.A.P.
Professor of Surgery & Pediatrics
Chief, Section of Urology

LETTER TO THE EDITOR

As Chairperson of the Department of Sociology, University of Nebraska-Lincoln, I am writing to correct a mistatement of fact in Paul Cameron's "letter to the editor" published in the December, 1985 issue of **The Nebraska Medical Journal.**

At the start of the third paragraph of his letter, Paul Cameron writes:

> "Joel Brodsky, a graduate student affiliated with the 'Gay Student Union' **according to his department** . . . . (my underlining)

Mr. Brodsky is a graduate student in our Department. So far as I can determine, no member of the Sociology Department staff has ever talked with Paul Cameron, either in person or on the telephone. An anonymous caller raised questions concerning Mr. Brodsky in a telephone call to one of our secretaries this past semester; the person would not identify himself; our secretary did not inform the caller of any of Mr. Brodsky's affiliations. The Department of Sociology **did not** inform Paul Cameron that Mr. Brodsky was "a member of the Gay Student Union."

Mr. Joel Brodsky is a valued member of our Department. We have every confidence in him as a young scholar and colleague, and support him fully as a person of probity and character.

Sincerely,
Harry J. Crockett, Jr., Chair
Department of Sociology

LETTER TO THE EDITOR

Our paper "Sexual orientation and sexually transmitted disease" (**NMJ,** August 1985) has achieved yet another letter of disagreement by those of peculiar sexual suasions employed by the University of Nebraska; this one authored by Drs. Brown and Cole (**NMJ,** November 1985):

1) they complain that the sampling process was not detailed to their satisfaction. Since no study is perfect, as with science in general, social science material is to be judged relative to that which exists in its field. Brown & Cole cite Bell, as "a prominent and recognized credible researcher on human sexuality". Since

Bell's claim to sexual fame in his 1970 San Francisco study of sexuality, a comparison of our and his study should enable appropriate judgment.

Bell describes his heterosexual sample as having been gotten by "using probability sampling with quotas" "to match the homosexual respondents in terms of race, sex, age, and education" (Bell & Weinberg, 1978, p. 38). Exactly how Bell "matched" **477** 'mainly heterosexuals' with **979** homosexuals is never mentioned much less explained but would, on the face of it, appear to be one of the more amazing bits of "matching magic" in the annals of science.

Brown & Cole contend that it is "vitally important, . . . (to know) what areas were represented in the sample responding to the questionnaire" and "did some clusters respond more than others?" but Bell only **cited** a procedure utilizing "random probability sampling to select census tracts and city blocks within the chosen tract" and didn't specify just what **he** did or how, much less the varying contributions of his various clusters. If it wasn't "vital" for Bell why should it be "vital" for Cameron? None of the large-scale studies of sexuality have provided such information (not Kinsey, not Saghir & Robins, not Cameron & Ross) and it is rare to find such detail in any journal reporting empirical research. The Eastern Psychological Association, which referees all papers submitted to it, in 1985 accepted a paper based upon the **exact** sampling methodology as appeared in the Nebraska Medical Journal (Cameron, Proctor, Coburn, & Forde) and **Psychological Reports,** a refereed journal, has accepted a different paper based upon the sampling methodology explicated **exactly** as in NMJ (three of the five reviewers commented on the very issue in point, one wrote "a very valuable piece of data, carefully collected and analysed", another "well-designed and significant", while the last wanted some more detail).

We used the 5 cities because examination of the various 'gay yellow pages' suggested that L.A. and Washington, D.C. were "higher', Omaha would be 'low' and Denver and Louisville 'middling' in homosexual outlets (such as bars, baths, bookstores), further, each represented different regions and SMA sizes (60th through 2ond). In all but Louisville we utilized the standard map of the city, numbered the coordinates, drew a systematic sample of the coordinates, and attempted to interview approximately equivalent numbers of respondents from each sampling point (in Louisville we had difficulty in getting interviewers to go to certain high crime parts of the city, so we exluded those areas from the study). I have been involved in many such efforts before. This process "works" to produce reliable, fairly representative data, as the various national polling organizations have also discovered. Responsible investigators who have questioned my results have gone out and done a study to see if what we reported was true. To my knowledge without exception, others have replicated my findings (for effects of second hand tobacco smoke, dirty word usage, personality differences between blacks and whites et cetera) and I am confident that a fair study performed by anyone else will replicate what we reported in NMJ.

The "charge", such as it is, is without merit, unless only Drs. Brown and Cole know "how things ought **really** to be done" and if they do, by all means let them go out, spend their nickel and time, and produce such a study. Being critics of science rather than doers of science, I doubt that they will find the time to tear themselves away from their homosexual interests long enough to accomplish such an undertaking.

2) Brown & Cole are disturbed by our detailed description of our return rates. What did Bell do? Although Bell alludes to "difficulties we had in finding black heterosexual females willing to be interviewed (p. 39)" Bell **never** tells us **how many** subjects were **contacted, how many** were **not at home,** or **how many refused!** Among differences between our study and Bell's are: we reported the numbers of our not at homes, our contact and rejection rates, and our compliance rate — Bell **provided none of these important pieces of information in three books** on his project. Since **none** of this information was published when Cole 'edited' Bell and his study for the Nebraska Symposium (1973) Cole either considered it irrelevant at that time or Cole couldn't/didn't get the information from Bell. With the Cameron et al study you know that precisely 56.5% of the selected sample did not respond, **with the Bell effort you have no**

idea whatsoever. We did an honest work, kept accurate records, and reported what happened as we collected our data. We detailed all of our investigation's shortcomings, Bell alluded to some problems but failed to provide the kind of detail that would make comparison with other research possible. What study is the more intellectually and scientifically responsible? Is our honesty and openness in **a** journal article a fault and Bell's non-reporting in three **books** a virtue?

Brown/Cole cite a "personal communication" from Bell to the effect that we couldn't establish "incidence rates" regarding sexual orientation from Bell's books on his study. How curious. Since Bell claims that homosexuality doesn't run in families and that he had obtained a random sample of 'mainly heterosexuals' why wouldn't the sum of their reports regarding the sexual orientations of their 831 siblings be reasonably treated as an estimate of the incidence of sexual orientations? If Bell really claims that I have "misrepresented" his data, then let him specify **specifically** how. Predictably, Bell **will** not do so, because he **did not** do so for Brown/Cole. If Bell has something to charge, by all means let him explicate it. Cowards and knaves hide behind vague generalities, an honest man "puts up or shuts up".

3) B & C are worried about "instrumentation" since we did not report about "the validity and reliability of the questionnaire. Did the respondents answer honestly?" Bell **alluded to,** but provided no specific answers to any of these questions either (and what else is social science but the systematic collection and analysis of what people claim? No one has followed a sample of homosexuals around to see if the 100 sexual partners they claim is "the truth"). If Bell and none of the other sexuality studies provided information about supposed 'reliabilities and validities' of asking people reasonably clear questions in English, why must we?

There are a number of particulars in which direct comparison between our and Bell's findings can be made.

While 6% of Bell's 'mainly heterosexual males' reported that they had been homosexually raped vs. our 1%, the difference would appear to be an effect of environment (there are proportionately more homosexuals in San Francisco [a 1985 random probability study reported that about 10% of the city's population claimed to be bi- or homosexual]), and I would bet on the national generalizability of our rather than his findings.

		Bell	vs.	Cameron	
hetero		mainly heterosexual	homo	exclusively	homo
ever sex with animal	Male	6%	22%	2%	13%
	Female	0	6	1	6
ever homosexually raped	Male	9	24	1	7
	Female	2	11	0	6

B & C are apparently concerned that our interviewers were "strangers" to respondents — there is no mystery or deficit here. Had we managed to employ those whom respondents **knew,** then we would have had reason to question our results. In our culture, people have many more reasons to protect their privacy from those whom they know than from those they do not know. "Stranger value" is an important part of getting answers to intimate questions.

4) B & C question our analysis because we "lumped" our data together. Actually, each of the 5 city's data traced the same pattern, so we would have preferred to present them separately to 'clinch our case'. But, as B & C would know had they bothered to publish original research, journals will not allot 10 pages of Tables when 2 'suffice'. Further, our statistical consultant (who is employed by the Univ. of Nebraska to provide just this sort of input) felt that the analysis was adequate to the task of accurately presenting the data.

B & C claim that, "in fact, from the data presented, it is possible to draw entirely different conclusions than those drawn by Cameron et al." Perhaps this intriguing assertion is why B & C have decided to make their mark on science by criticizing others rather than reporting original sexual research of their own.

5) B & C now turn to our discussion section. First they criticize our opinion that practicing homosexuality is best regarded as a 'bad habit' since such is not the current official position of the American Psychiatric or Psychological Assns! Indeed. 40 years ago both associations considered homosexuality an illness. Were they quite wrong then and quite correct today? Will they change their collective minds next

year on the issue? Piffle on them both. Their abandonment of historic views of homosexuality is partially responsible for the AIDS epidemic. I believe that the overwhelming bulk of evidence supports the position that homosexuality is nothing more or less elegant than a very bad habit — a misfortune for those addicted and for the society in which they are housed.

That human sexuality is reasonably plastic is pointed up by the adopted of bisexuality and the abandonment of homosexuality by the groups cited in our article. The presence of ex-smokers testifies to the habitual nature of tobacco smoking and lung cancer underscores the "bad" label. Similarly, the presence of ex-homosexuals testifies to the habitual nature of homosexuality and AIDS, hepatitis B and nausium underscore the "badness" thereof.

B & C "Cameron suggests that homosexuals "claim to have more frequently 'deliberately' infected others". What item on the questionnaire addressed the issue concerned with "deliberate" motivation?"

Really, gentlemen, you are going to simply **have** to see your ophthalmologist. Second page, second column of our article under "the items relevant to this report were: . . . When you knew that you had a contagious disease, how often have you had sex to infect others?" B & C say that they find **nothing** about "deliberate intentionality" in this item. Perhaps now the reader can understand B & C's request for "reliability and validity' measures— these Ph.D. worthies have great difficulty **understanding** English (and, I might add, **using** it as well — what, pray tell is "deliberate intentionality"? In the Gosset Webster Dictionary intentional is **defined** as "deliberate", are we to take B & C to mean that since homosexuals didn't claim to be intentional, then they were not intentional?!?). No wonder the University is running short of funds — too much money is going to support those of peculiar sexual and linguistic orientations! If the University has to eliminate 'dead wood' for budgetary purposes, a couple of likely candidates have just floated into plain view.

6) Last, B & C are worried about my credibility. They refer to an article in the **Lincoln Star** in which "Cameron asserted the dangerousness and criminal nature of homosexuality which he reported was supported by Kinsey data." They then imply that I misused Kinsey material to arrive at my statement. While I hold no particular brief for the Kinsey data (it was gathered worse than indifferently with a conscious pro homosexual bias and even more sloppily reported) I believe that a fair person would agree with me. Even the Kinsey data suggest that homosexuals are:

(1) at least thrice as apt as heterosexuals to molest children (for instance, .1% of white males in the 'basic' sample admitted to coitus with a female under the age of 13 since they were aged 18 (p. 289; Gebhard & Johnson, 1979) vs 4.1% of white non-delinquent homosexuals who admitted to homosexual contact with boys under the age of 13 since they were aged 18 (p. 512); and

(2) considerably more apt to engage in criminal activities (3% of their "control group" vs 13% of their "general population of prison inmates" had "extensive homosexual experience" [Gebhard et al 1965, p. 625]).

Next B & C drag up an obscure speech (obscure in that no paper covered nor reported on it at the time) I made in 1982 in which I said something that a trusted person claimed that she had checked out. B & C quote the **Star** to the effect "[Cameron] admits the rumor was without foundation." I never said that I had cited a rumor nor that it was without foundation. It appears that my informant made a mistake. At worst I trusted someone whom I shouldn't have. Small beer.

Next B & C claim that I have been "censored by a judge in Texas for presenting misleading testimony." Yes, Judge Buchmeyer did, in his own halting, misspelled and misquoting way, criticize me sharply. But he was repudiated 15 to 1 on the **merits** by the 5th circuit meeting **en banc** and I was the expert witness of record in the overturning of his wrongheaded decision to strike down the Texas anti homosexuality law because homosexual activity was protected as a constitutional right. As a federal judge, Buchmeyer can say or write anything he wishes about any person or topic that comes before him without the possibility of legal redress. He is as sound at weighing social science literature as he is at interpreting the constitution. If B & C read the entire transcript carefully, perhaps even they would understand why I am pleased to have been associated with this case in the way I was. But given B & C's level of scholarship, predictably they will continue to intensively examine newspaper reports rather than primary sources.

They charge that I was dropped from the American Psychological Association. The APA used to be a professional association and essentially nothing more. Recently it has taken on the cast of a quasi-religious (pro-humanism, anti-Christian, pro-selfism) quasi-political (pro-feminism, pro-gay, pro-abortion) left wing political action committee. I am proud to have resigned on Nov. 7, 1982 and only wish that I had done so sooner. B & C claim that "[Cameron] fails to note that he was under investigation prior to his resignation. This is like an executive resigning so that he or she will not be fired." One has to wonder how B & C **know** that "he was under investigation". If true, it is curious that **I** did not know it, that **I** had never been informed of such an investigation, further, supposedly the APA seals all such information from examination by anyone beyond the ethics committee. Therefore either B & C are fabricating or the APA, in violation of its own supposed ethical rules of conduct, is sharing information with B & C that was not shared with me! Given the character of B & C I suspect the former, but would put nothing beyond the APA. Come forth with your evidence for this charge B & C, are you doing a little "lying" or do you have documentation to back up your assertion? As to "charges" that I have been "censured by the Nebraska Psychological Association for distorted presentations on homosexuality", well, I have never **heard** from the NPA about such a censure, but, given the membership (which includes B & C) I shouldn't put it past them. But the issue is still exactly the same: **HOW have I distorted presentations on homosexuality?** NPA, if you are out there and this "charge" is true, ownup, specify. Better still, choose your champion: I challenge this worthy to a scientific debate before a fair tribunal. Predictably NPA will be as cowardly about the debate as about their supposed "censure" (NPA apparently feels that it is quite proper to charge, convict, and punish by public ridicule anyone with whom it disagrees **without even notifying the individual concerned.** Such "justice" falls even below the standards of the USSR or Hitler's Germany. But what else to expect from a putative 'professional association' that admits the sexually perverse, defends the perverse, and attacks those opposing perverts?)

B & C adjudge that the "publication by Cameron et al would not pass as a senior research paper or masters thesis in any respected psychology department" and that "now the Cameron data are public, it is possible for everyone to see the study for what it is — useless and questionable data." A comparison of our study with that reported by Bell reveals our effort was substantially better in:

representativeness of sample (Bell's was mainly volunteer);

-completeness of reporting of methodology (much of Bell's study cannot be criticized because the methodology has never been presented to the scientific community even though he had 3 books to do it in);

-including 5 different metropolitan areas (Bell reported out of only San Francisco); and

-being more restrained in interpretations of our material (Bell is flagrantly pro-homosexual).

I believe that the Bell effort deserves about a D- and the ISIS study about a B-. But if B & C consider Bell's effort "good" then the ISIS study must glow in the dark.

B & C seem to be particularly galled by "the negative tone of the discussion . . . more intended to suggest punishment than compassionate medical treatment. . . " I doubt they would be appalled by a pro-homosexual bias. Here our society must attempt to withstand the foolish activity of homosexuals in bringing us AIDS and who knows what other new diseases, and B & C are worried about the **rights and treatment of the perpetrators!!** The latest study of homosexual men (655 of them in San Francisco, McKusick et al, 1985) published in a referred journal, found even the **least** promiscuous of these perverts (a quarter of the sample) continuing in outrageously anti-biological activity, to wit: 5% admitted to drinking urine, 7% to having someone insert their fist up their rectum, 33% to sticking their tongue into someone else's anus, 59% to receiving semen in their rectum, and 52%

ingesting semen IN THE PAST MONTH!! The more promiscuous of these perverts did all of the above with numerous people in the same period of time. In the pursuit of sexual pleasure these fools are compromising the sanitation of our entire society? Well might scholars such a B & C, who live so comfortably at state expense, fixate upon the **rights** of perverts and ignore any **responsibility** on their part. The irresponsible side with the irresponsible; in B & C's vocabulary "compassion" is but a code word for "we've got to accept and approve of people no matter what they do". Such an adolescent view of social justice deserves opprobrium, and I, for one, resent paying taxes to have the students of the state subjected to this tripe in the name of education.

A deadly, civilization-threatening virus is loose in our midst and B & C are worried about compassion for fools instead of the survival of our children. I feel sorry for drug abusers and homosexuals, both have acquired detestable and dangerous habits. But when their bad habits endanger the lives of everyone's children, sentimentality must be displaced by responsible concern for the continuance of society. Homosexuals showed no compassion to the scores of children dead and dying of AIDS when they brought this disease to our shores and transmitted it throughout the USA. Homosexuals and drug abusers showed no compassion to the hundreds of Americans they have killed with their tainted blood. Genuine compassion is displayed in helping to keep society on a course that ensures its survival, not in acting the "bleeding heart" over every wrongheaded thing that the foolish fall into.

Sincerely
Paul Cameron

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University of Nebraska Medical Center News:

The naming of a University of Nebraska Medical Center conference room honoring long-time faculty member, Dr. C.A. McWhorter, will be submitted for approval to the Board of Regent's.

"The C.A. McWhorter Conference Room," will provide a much needed facility in which members of the department of pathology and microbiology, as well as other UNMC personnel, can meet. Existing space in the University Hospital Clinic Building (the medical technologists' lounge) is suggested as the site of the facility.

"The proposed conference room would be much more convenient to everybody in the department and will allow us to accommodate up to 70 people. Our present conference room is too small and only accommodates 30 people," said Dr. David Purtilo, chairman of the pathology and microbiology department.

Dr. Purtilo, who initially proposed the conference room, said that plans for the room call for excellent audio/visual equipment and walls which can be written on for instructing. In addition, the room can be divided into two smaller teaching rooms with the use of a sound-proof partition.

Along with Dr. Purtilo, Dr. Robert Waldman, dean, College of Medicine, proposed that the conference room be named after Dr. McWhorter, who has been affiliated with the University of Nebraska Medical Center for nearly 50 years. Dr. McWhorter received his medical degree at UNMC in 1944, where he also completed his residency in pathology. In 1949, he became an instructor and later served as chairman of the pathology department from 1965-1981.

"Dr. McWhorter has been a part of the training of the vast majority of pathologists now practicing in Nebraska and developed a fine clinical laboratory service at the Medical Center. He has served this University with distinction and has made a significant contribution to medical education," said Dr. Purtilo.

Thus far, $26,000 has been donated for remodeling of the proposed facility by Dr. McWhorter's associates in pathology, other UNMC faculty members, and former students. A departmental committee, headed by Dr. James Newland, is working to design the new conference rooms.

News From University of Nebraska Medical Center

If the United States does not anticipate and plan for the health care needs of its elderly population, the country could be ill prepared for the health care demands it will face by the year 2000.

With this realization, the University of Nebraska Medical Center is putting special emphasis on developing health services and research programs for the elderly, as the Board of Regents will hear at its January 18th meeting.

Dr. Jane Potter, assistant professor of internal medicine, has developed a clinic which many health professionals believe could be a model for caring for the elderly.

Dr. Potter says the need for these specialized geriatric clinics, especially in Nebraska, is evident when one considers the growing numbers of older people and the resultant economic and health care demands.

Census figures for 1980 show 13.1 percent of Nebraska's population over the age of 65 years, compared to 11 percent nationally. "Nebraska ranks third among the 50 states in the number of nursing home beds per one thousand population," says Dr. Potter about one of her biggest statistical concerns. "It's 88.6 in Nebraska and 57.5 nationally."

The biggest concern for the director of UNMC's geriatrics assessment clinic, however, is that Nebraska's figures will become the national standard. She said demographic information shows that the U.S. will catch up with Nebraska by the year 2000; and by the year 2020, the percentage of the over-65 population will plateau at 15 percent.

It's simply a matter of people surviving longer, she said. "Around 1900, half of the people were dead by age 50. Now, 50 percent of the population survives to 80."

Dr. Potter believes the importance of such longevity is being diminished as large numbers of elderly continue to face institutionalization and health problems. On a social scale, this means increased pressure on public health resources, which are already being taxed in trying to meet the needs of the elderly.

"The cost of nursing home care will reach $76 billion by the year 1990 and approximately 60 percent of that bill will be paid for with state and federal dollars," she said.

On an individual scale, it means the family guilt and personal dilemma of being dependent on a community or social agency for the necessities of living, or having one's personal potential eroded by ill health.

Helping the elderly and their families to cope with or minimize such situations, while seeking remedies to the related social problems, is a primary goal of the geriatric assessment clinic.

The clinic is staffed by a multi-disciplinary team of physicians, nurses, social workers, psychologists, nutritionists and other health professionals who work with community agencies to assist elderly and provide medical treatment for geriatric-related problems. The clinic also serves as an educational base for Medical Center students who want to learn about geriatric care.

She said the Medical Center is focusing on the development of new and innovative approaches to geriatric medicine. A task force of faculty representatives from each UNMC college is exploring such approaches, and health services for the elderly are being expanded. But more needs to be done to keep abreast of the social and medical needs of elderly people, said Dr. Potter. She hopes one day the Medical Center can have a 100 to 130-bed geriatric health care facility where geriatric research, health professions training and care can be closely integrated.

"That will have to be a joint effort among the Board of Regents, private and government agencies," said Dr. Potter, whose clinic currently receives two-thirds of its funding from the Liewit and Internorth Foundations and one-third from Douglas County.

"But we have a chance to be a leader in geriatrics among academic institutions in this country. All we need is the commitment from government and the private sector for better geriatric educational programs so we can take proper care of older people and limit the number who need nursing home care."

Threat of Aids Virus in Tears Discounted by Elite Eye Panel

Sponsored by
National Society to Prevent Blindness,
Nebraska Affiliate

Because of possible public fear of contracting the AIDS virus during routine eye care, a blue-ribbon panel of eye care specialists, appointed by the National Society to Prevent Blindness (NSPB) reported today that neglecting such treatment greatly outweighs the possibility of contracting the AIDS virus during an eye examination.

The general public is putting itself at risk by neglecting routine eye treatment and avoiding screening tests for such potentially blinding eye diseases as glaucoma, diabetic retinopathy and macular degeneration, or other conditions such as amblyopia and strabismus, for fear of contracting AIDS as a result of contact with medical equipment that may have been exposed to the tears of AIDS victims.

"This was the conclusion released today in a report from the eye specialists and researchers who make up the Task Force on AIDS and Eye Health Care at a briefing for medical and health, social and allied organizations involved in AIDS education," said Julie Canfield, Executive Director, of the National Society to Prevent Blindness, Nebraska Affiliate. After considering all available evidence, the Task Force concluded that no known case of AIDS has been traced to transmission of the virus through tears.

Present at the briefing in New York City were: Denis M. O'Day, M.D., Task Force Chairman and professor of ophthalmology, Vanderbilt University School of Medicine, Nashville; and Frank W. Newell, M.D., chairman of NSPB's Board, and editor-in-chief of the **American Journal of Ophthalmology,** who acted as moderator.

The Task Force was formed when the National Society to Prevent Blindness found there was substantial public concern about the risk of incurring the disease when undergoing routine eye examinations and treatment. It was charged with providing the public with an informed assessment of the risk of infection through tear fluid.

Dr. O'Day pointed out that evidence that eye health-care workers and volunteers are not at any sigificant risk of contracting the disease as a result of contact with only the tears of AIDS patients. He advised that to eliminate any risk of transmitting the AIDS virus to eye patients, all health-care workers and volunteers adopt the simple standard sterilization procedures recommended by the Centers for Disease Control (CDC).

The Task Force also concluded that the risk for contracting the AIDS virus in screening programs is remote under current hygienic procedures. NSPB's Glaucoma Committee is in complete agreement with the conclusions of the Task Force. Considering the importance of preventing blindness by early detection of glaucoma, M. Bruce Shields, M.D., professor of ophthalmology, Duke University Medical Center, and Glaucoma Committee chairman reported, "The Committee recommends that glaucoma screening programs should not be discontinued for fear of transmitting infections . . . "

The NSPB's AIDS Task Force and Glaucoma Committee recommend that those engaged in glaucoma screening using the Schiotz applanation tonometers (contact tonometers) adhere to the sterilization procedures recommended by the CDC. Optionally, disposable single-use tonometer tips (tonotips) can be used. The non-contact (airpuff) tonometer does not touch a patient's eye and therefore could not be a mechanism for transmission of the virus.

In preschool vision screening programs, the use of disposable, single-use occluders (a shield used to cover first one eye and then the other during the screening) is recommended.

In Memoriam

By medicine life may be prolong'd
yet death
Will seize the doctor too.
—Shakespeare

Samuel F. Moessner, M.D. — (Born January 30, 1919 - Died December 15, 1985) Medical Specialty - Thoracic Surgery. Doctor Moessner was a graduate of the University of Nebraska College of Medicine in 1943 and practiced in Lincoln, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Doctor Moessner is survived by his wife, Helen; sons, Doctor Samuel E., Fort Riley, KS, Doctor Harold F., Fort Campbell, KY, Doctor David P., Atlanta, GA, Doctor Stephen P., Omaha; sister, Helen S. Moessner; seven grandchildren, nieces and nephews.

Charles F. Heider, Sr., M.D. — (Born August 17, 1894 - died January 2, 1986) Medical Specialty - General Practice. Doctor Heider was a graduate of the University of Nebraska College of Medicine in 1921 and practiced in North Platte, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include one son, Doctor Charles F. Heider, Jr. and his wife Nancy of North Platte; two grandchildren, Cynthia Kaliff of Lincoln and C. Garey Heider of Helena, Montana; and two great grandchildren.

Raymond Johnston, M.D. — (Born August 15, 1923 - died November 23, 1985) Medical Specialty - Protocology. Doctor Johnston was a graduate of the University of Nebraska College of Medicine in 1950 and practiced in Kearney, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Doctor Johnston is survived by his wife, Merle; son, Steve of Sunnyvale, CA; father Dr. R. S. Johnston of Kearney, sister, Joanne Royse of Santa Anna, CA; and three grandchildren.

Clyde W. Wilcox, M.D. — (Born 1901 - died January 4, 1986) Medical Specialty - General Practice. Doctor Wilcox was a graduate of Temple University, Philadelphia, Pennsylvania, in 1932, and practiced in Grand Island, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Ethelyn; a son, Doctor Clyde Wilcox, Jr. of Virginia Beach, VA; a daughter, Carol Stiff of Idaho Springs, CO; two brothers, Guy of Columbia, MO and Woodrow of Shawnee Mission, KS; a sister, Mildred Teodori of Kansas City, MO; and five grandchildren.

Welcome New Members

Warren J. Pevnick, D.O.
320 McNeel Lane
North Platte, NE 69101

Dennis Edwards, M.D.
#17 Skyline Drive
Kearney, NE 68847

Mark C. Johannsen, M.D.
General Radiology, P.C.
The Hevner Bldg.
Fremont, NE 68025

J. Howard McIntosh, M.D.
1500 Koenigstein
Norfolk, NE 68701

Bryon L. Barksdale, M.D.
1311 South Oak
North Platte, NE 69101

Richard F. Klug, M.D.
310 W. 7th
McCook, NE 69001

Michael Dehning, M.D.
6801 N. 72nd
Omaha, NE 68122

David Finkle, M.D.
742 Doctors Bldg.
Omaha, NE 68131

Layton F. Rikkers, M.D.
UNMC - 42nd & Dewey Ave.
Omaha, NE 68105

Byers W. Shaw, M.D.
UNMC - 42nd & Dewey Ave.
Omaha, NE 68105

Jon Q. Taylor, M.D.
515 So. 26th St.
Omaha, NE 68105

Alan G. Thorson, M.D.
711 Professional Tower
Omaha, NE 68102

Robert H. Waldman, M.D.
UNMC - 42nd & Dewey Ave.
Omaha, NE 68105

Peter C. Chilian, M.D. (Reinstated)
Methodist Hospital
Omaha, NE 68114

John H. Worthman, M.D. (Reinstated)
716 E. 16th
Cozad, NE 69130

Robert J. Lynn, M.D.
Oshkosh, NE 69154

Ronald L. Dobesh, M.D.
3320 Avenue A
Kearney, NE 68847

Coming Meetings

1986 ANNUAL SESSION — April 24-28 — Omaha Marriott

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

March 2-7, 1986, 6th Annual Keystone Medical Ski Conference "Diagnostic Dilemmas - The Approach and the Answers", Keystone Lodge, Keystone, Colorado. This course is held in conjunction with the Dental Ski Conference and the Nursing Ski Conference.

March 5-12, 1986, Review and Update: General Pediatrics & Family Practice, Royal Lahaina, Kaanapali Beach, Maui, Hawaii.

35TH ANNUAL PROGRAM ON OBSTETTRICS AND GYNECOLOGY — March 13-14, 1986, Holiday Inn Central, Omaha. Co-sponsored by Colleges of Medicine and Nursing, University of Nebraska, Schools of Medicine and Nursing, Creighton University, Departments of Obstetrics and Gynecology. (9 credit hours)

SPORTS MEDICINE — March 19, 1986, Hastings Holiday Inn. Topics will include: Pre-Participation Physicals, Evaluation for Return to Play, Sports Nutrition. 3:00-6:00 p.m. (3 credit hours)

FAMILY PRACTICE REVIEW, 1986 — April 14-25, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Approved for 87 hours of AMA Category I and AAFP Prescribed. One week and split sessions (one week of April session and one week of May session) accepted. "Mini" board exams given daily.

PEDIATRIC PHARMACOLOGY — April 26, 1986, Omaha Marriott, 9:00-4:00 p.m. Sponsored by Nebraska Chapter of American Academy of Pediatrics in conjunction with Nebraska Medical Association. Program Chairman, Tom Tonniges, M.D., Hastings, Nebraska.

NEBRASKA PATHOLOGY CONFERENCE — May 3, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Sponsored by Nebraska Association of Pathologists (4 credit hours)

FAMILY PRACTICE REVIEW, 1986 — May 5-16, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Approved for 87 hours of AMA Category I and AAFP Prescribed. One week and split sessions (one week of April session and one week of May session) accepted. "Mini" board exams given daily.

CURRENT TREATMENT OF VENTRICULAR ARRHYTHMIAS TO PREVENT SUDDEN DEATH — June 6, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Guest speakers John Fisher, Montefiore Medical Center, New York, E. Neil Moore, D.V.M., University of Pennsylvania, Philadelphia and Joel Morganroth, M.D., Hahnemann University, Philadelphia. (6 credit hours)

CURRENT CONCEPTS IN NEUROLOGY — June 13-14, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. A practical neurology program designed for the primary care physician. (12 credit hours)

TETONS PEDIATRIC CONFERENCE — June 29-July 3, 1986, Jackson Role Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Pediatrics. Subjects to include Ophthalmology, General office pediatrics and gastroenterology. Guest speaker: Joan Hodgman, M.D., USC School of Medicine, Neonatologist. (17¼ credit hours)

TETONS SPORTS MEDICINE CONFERENCE—July 7-10, 1986, Jackson Hole Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Orthopaedic Surgery and Rehabilitation. Division of Sports Medicine. Guest speakers: Oded Bar-Or, M.D., Director of Children's Exercise and Nutrition Center, McMaster University, Hamilton, Ontario, Canada; John A. Feagin, M.D., President, American Orthopaedic Society for Sports Medicine (20 credit hours).

EMERGENCY MEDICINE REVIEW— September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

EMERGENCY MEDICINE REVIEW— October 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

UNMC College of Medicine Alumni Association

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSN. — Alumni Reception, Saturday, April 12, 1986, 5:30-7:00 p.m., Omaha Marriott Hotel. In conjunction with Nebraska Academy of Family Physicians Meeting. Cash Bar. All alumni and guests cordially invited.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSN. — Executive Committee Dinner, Sunday, March 16, 1985, 4:00 p.m. - Social; followed with meeting and dinner. Omaha Marriott Hotel. Executive Committee and spouses urged to attend.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSN. — Annual Business Meeting, Saturday, April 26, 1986, in conjunction with Nebraska Medical Association Meeting; 4:30 p.m., Lincoln Suite, Omaha Marriott Hotel, Omaha. Alumni are urged to attend; spouses and guests are welcome.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE - ALPHA OMEGA ALPHA, AOA DAYS — April 8 & 9, 1986, UN Medical Center, Omaha, Nebr. Speaker: William J. Wilson, M.D., Dept. of Radiology, Memorial Hospital Medical Center, Long Beach, Calif., and Adjunct Professor of Radiology, University of California at Irvine. April 8, 12:00 noon, CCE Amphitheatre, UNMC - Everyone welcome. AOA Banquet: April 9, 1986, 6:00 p.m., Highland Country Club, Omaha.

LINCOLN GENERAL HOSPITAL

FIFTH ANNUAL CORNHUSKER/CANADIAN CLINICAL CONFERENCE — June 22-27, 1986. Lynn Lake, Manitoba, Canada. Fee: $150.00. For information, contact: Cathy Kinnaman, RN, Education and Staff Development, Lincoln General Hospital, 2300 South 16th Street, Lincoln, NE 68502, (402) 473-5638.

CREIGHTON UNIVERSITY

Mar. 1-8, Primary Care of Adolescents, 24 hours - Posada Vallarta Hotel, Puerto Vallarta, Mexico. Fee: $300.00.

Mar. 2-9, Pulmonary Medicine/Infectious Disease, 24 hours - Virgin Islands Cruise. Fee: $300.00.

Mar. 13-14, Florida Tutorial (OB/GYN), 14 hours, Airport Marriott Hotel, Orlando, Florida. Fee: $175.00.

Mar. 17-19, Arrhythmias: Interpretation, Diagnosis & Management, 11 hours, Paradise Island Resort, Nassau, Bahamas.

Mar. 19-21, Coronary Heart Disease and Arrhythmias: Diagnosis and Management, 11 hours, Hyatt Regency Hotel, Cancun, Mexico.

Mar. 21-22, Coronary Heart Disease and Arrhythmias: Diagnosis and Management, 11 hours, Bahia Mar Hotel, Ft. Lauderdale, Florida.

Apr. 5-12, Current Topics in Gastroenterology for the Primary Care Physician, 24 hours, Beaver Run Resort, Breckenridge, Colorado. Fee: $125.00.

Apr. 14-16, Coronary Heart Disease and Arrhythmias, 11 hours, Sheraton Maui Hotel, Island of Maui.

Apr. 16, Symposium on Acquired Immune Deficiency Syndrome, 4 hours, Rigge Science Hall, Creighton University. Fee: $20.00.

Apr. 18-19, Arrhythmias: Interpretation, Diagnosis & Management, 11 hours, Marriott Hotel, Washington, D.C.

May 17-31, Update on Infectious Diseases & Endocrinology, 36 hours, Scandinavia Study/Tour. Fee: $400.00.

May 23-25, Family Medicine Update, Okoboji, Iowa.

May 26-29, Symposium on Foregut Disease, 24 hours, London, England. Fee: $50.00 with Travel Group.

June 7, Maurice Grier Symposium (OB/GYN), Marriott Hotel, Omaha, Nebraska.

June 16-30, GI Medical/Surgical Update, 36 hours, Germany Study/Tour. Fee: $400.00.

Aug. 29-30, Family Medicine Update, Okoboji, Iowa.

Sept. 18-30, Cardiology/Rheumatology Update, 36 hours, Ireland Study/Tour. Fee: $400.00.

For further information, contact the Division of CME, Creighton University School of Medicine, Omaha, Nebraska 68178 402/280-2550.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICAL ETHICS — March 7, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, Kansas.

ANNUAL POSTGRADUATE PEDIATRICS SYMPOSIUM — March 12-13, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

INFECTION CONTROL: HOW DO WE LIVE WITH AIDS? — May 13-14, 1986. Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Fee: $90.00. Sponsored by the University of Kansas Medical Center, Office of Continuing Education. Credit: 9 hrs. AMA Cat 1, AAFP.

ANNUAL SPRING SCIENTIFIC SEMINAR ON PATHOLOGY — May 17, 1986. Sponsored by the University of Kansas Medical Center, Office on Continuing Education. Location: Rieke Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA Cat 1.

SAM E. ROBERTS NUTRITION SYMPOSIUM — March 25, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

AIDS: ARE YOU AT RISK? March 28, 1986 at Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas.

COMMON GASTROENTEROLOGY PROBLEMS — April 1, 1986 at Alameda Plaza Hotel, Wornall Road at Ward Parkway, Kansas City, Missouri.

AMERICAN MEDICAL SOCIETY ON ALCOHOLISM AND OTHER DRUG DEPENDENCIES — April 18-22, 1986 at the Westin St. Francis Hotel in San Francisco, California. Information may be obtained by writing AMSA DD, 12 West 21st Street, 7th Floor, New York, New York 10010.

THIRTY-SIXTH ANNUAL POSTGRADUATE SYMPOSIUM ON ANESTHESIOLOGY — April 25-27, 1986. Sponsored by the University of Kansas Medical Center. The course will be held at the Crown Center Hotel in Kansas City, Missouri. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

MICROCOMPUTER JUNGLE: IMPACT ON HEALTH CARE — April 17-18, 1986, sponsored by the University of Kansas Medical Center. Location of the course will be Doubletree Hotel, Overland Park, Kansas. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

FIFTH ANNUAL SUMMER MEDICAL SYMPOSIUM: "MEDICINE FOR THE PRACTICING PHYSICIAN"—July 10-13, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education and the University of Kansas School of Medicine, Wichita, KS 67214. Location: Broadmoor Hotel, Colorado Springs, CO. Credit: 15 hrs., AMA Cat 1. Fee: $375.00.

SCHEDULED MEETINGS

THE NEBRASKA CHAPTER OF THE AMERICAN ACADEMY OF FAMILY PHYSICIANS will hold their 38th Annual Scientific Assembly, April 11 and 12, 1986 at the Marriott Hotel, Omaha, Nebraska. Contact: Phyllis Hansen, Executive Director, Nebraska Academy of Family Physicians, 401 No. 117th, Suite 202, Omaha, Nebraska 68154 (402) 333-5856.

"MEDICAL TECHNOLOGY ASSESSMENT FOR HEALTH PROFESSIONALS" — June 16-20, 1986. Offered by faculty of the Sloan School of Management and visiting faculty as part of the 1986 MIT Summer Session. Continuing medical education credit for the program offered by the Office of Continuing Medical Education at Tufts University School of Medicine. A detailed description of the program is available upon request from the Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge, MA 02139.

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7377 Pacific St., Ste. 216A, Omaha 68114

American Heart Association, Nebraska Affiliate
Dennis N Nissen, Executive Director
3624 Farnam St., Omaha 68131

American Lung Association of Nebraska
8901 Indian Hills Dr., Ste 107, Omaha 68114

American Red Cross
P.O. Box 83267
1701 "E" St., Lincoln 68501

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Health Manpower Referral Service, State of Nebraska
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Lincoln 68509

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Room 212, 215 Centennial Mall, Lincoln 68508

March of Dimes — Birth Defects Foundation
1618 L Street, Lincoln 68508

MID-PLAINS POISON CONTROL CENTER
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(402) 390-5400 or 800-642-9999 (toll free Nebraska)

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Muscular Dystrophy Association
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National Kidney Foundation of Nebraska
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(402) 397-9234 — NE toll free 800-642-1255

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National Society to Prevent Blindness, Nebraska Affiliate
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(Continued from page 10A)

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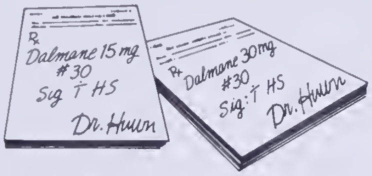

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Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase, and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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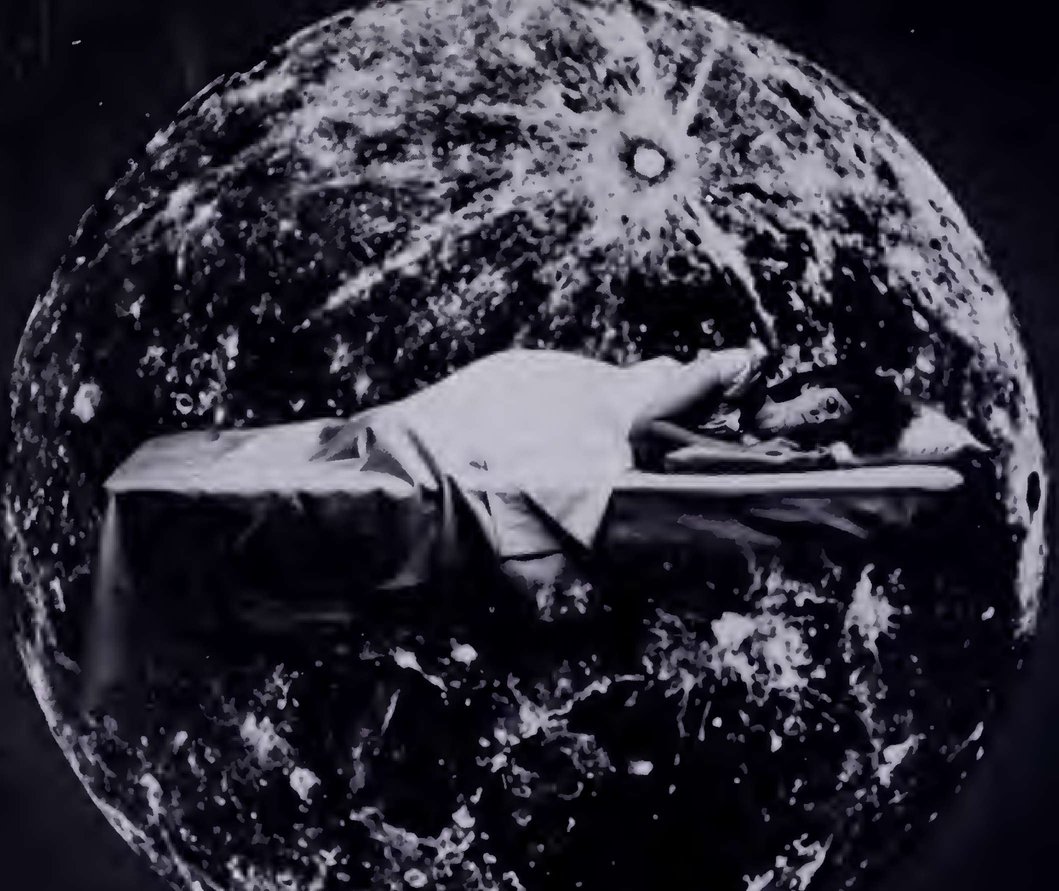

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THE NEBRASKA MEDICAL JOURNAL

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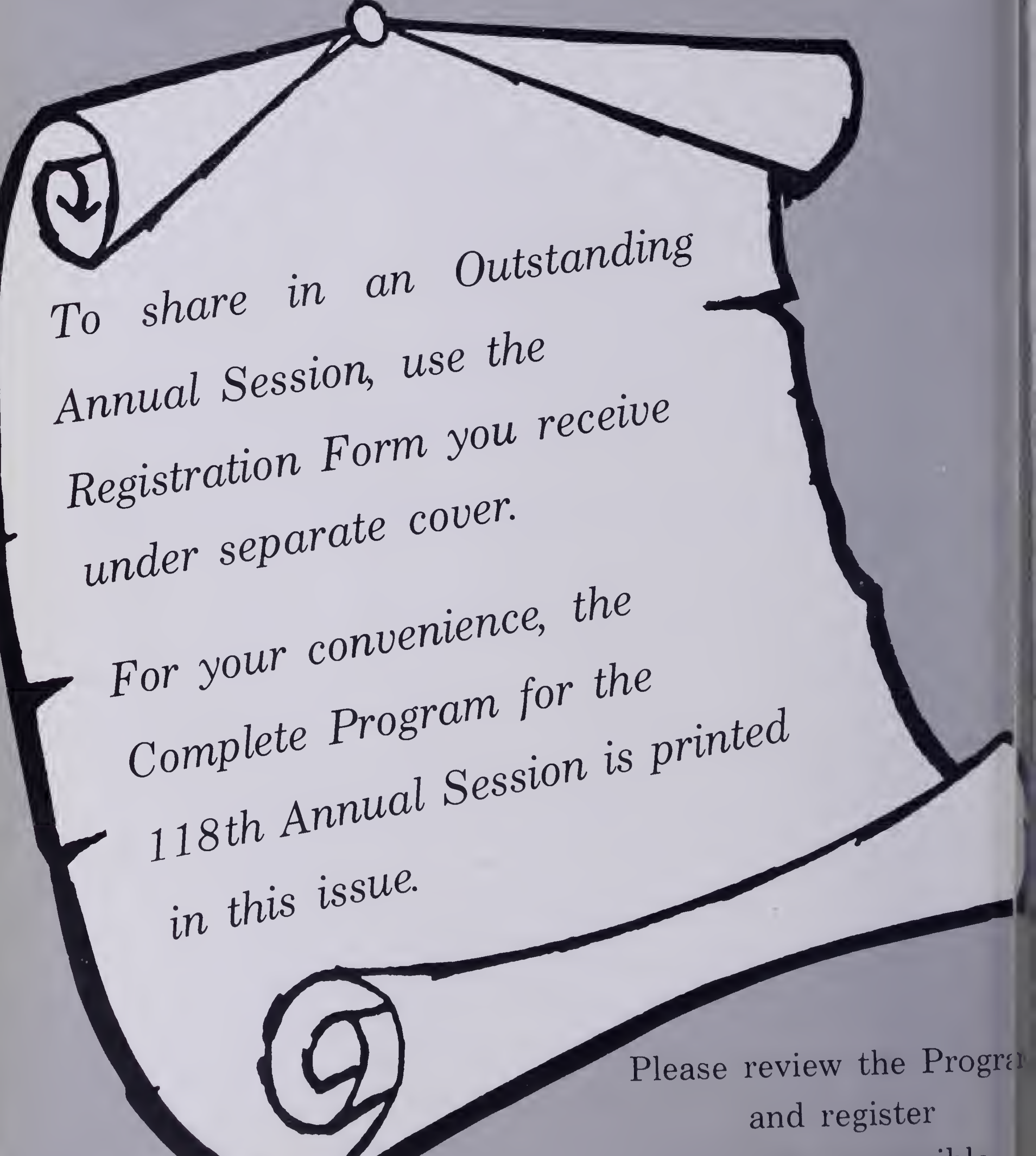

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For your convenience, the Complete Program for the 118th Annual Session is printed in this issue.

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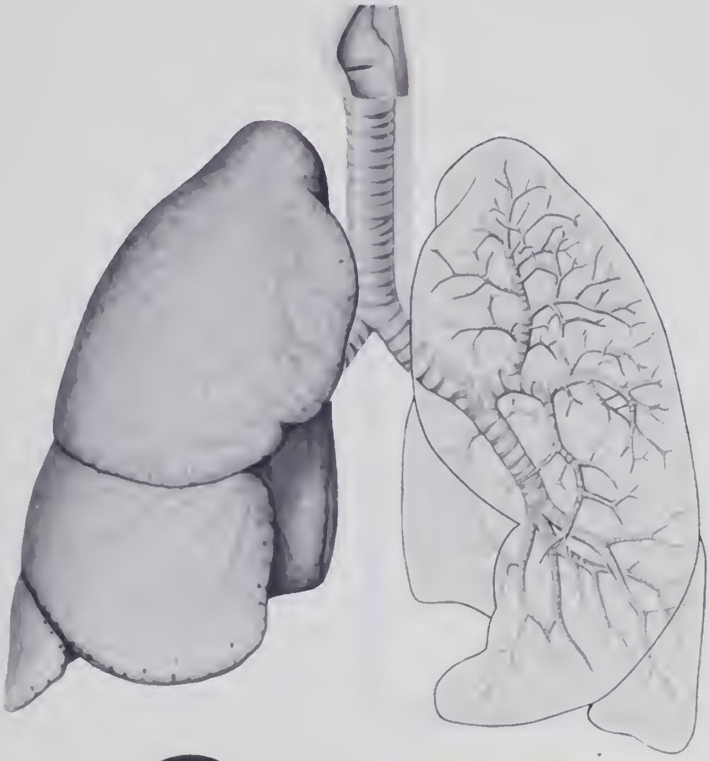

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250-mg Pulvules® t.i.d.

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H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
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Brief Summary **Consult the package literature for prescribing information**

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae* and *S pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS TO BOTH DRUG CLASSES

Antibiotics including Ceclor should be administered cautiously to any patient who has demonstrated some form of allergy particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins and cephalosporins), therefore it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies and fluid electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by C *difficile* Other causes of colitis should be ruled out

Precautions: *General Precautions* — If an allergic reaction to Ceclor® (cefaclor, Lilly) occurs the drug should be discontinued and if necessary the patient should be treated with appropriate agents, e g pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict s and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor® (cefaclor, Lilly) There are, however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers — Small amounts of Ceclor have been detected in mother s milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0.21, and 0 16 mcg/ml at two, three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbilliform eruptions (1 in 100) Pruritus, urticaria and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

[061782R]

Note Ceclor® (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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Address all correspondence relating to subscriptions, advertising or address changes to Mr. Ken Neff, Business Manager, 1512 First National Bank Building, Lincoln, Nebraska 68508. Phone (402) 474-4472.

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NINTH ANNUAL BLACK HILLS SEMINAR ON ADVANCES IN CLINICAL PEDIATRICS

The Ninth Annual Black Hills Seminar on Advances in Clinical Pediatrics — June 18, 19 and 20, 1986, at Sylvan Lake Resort, Custer, South Dakota, sponsored by the Department of Pediatrics and Adolescent Medicine, University of South Dakota School of Medicine. Guest faculty include: Drs. James Corrigan, Jerome Klein, George Little and Lynn Taussig. For complete conference information, contact:

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AMA News Notes

There Are Fewer Medicare participating physicians this year. A statistical comparison released by the Health Care Financing Administration (HCFA) shows that there currently are 130,691 participating physicians, which represents 28% of those physicians seeing Medicare patients. That represents a drop of two percentage points from the first year of the program, which was created under the Deficit Reduction Act of 1984.

HCFA reported that 23,130 physicians dropped prior participating agreements, while 19,150 physicians entered into agreements this year. In most states the percentage of participating physicians remained stable or dropped slightly, but several showed sharp declines. They were: Colorado, 28% participating now vs. 39% in 1984; the District of Columbia, 31% vs. 53%; Louisiana 19% vs. 29%; Nevada 22% vs. 36%; and New Mexico 18% vs. 48%.

Alabama again has the highest rate, 54%, of participating physicians. The lowest rate, 8%, is in South Dakota. Other states with 40% or more physicians in the program are Pennsylvania, Massachusetts, Rhode Island, Kansas, Arkansas, Michigan, and Vermont.

* * *

Otis R. Bowen, M.D., secretary of the Dept. of Health and Human Services (HHS), received standing ovations from 700 people at the AMA National Leadership Conference in recognition of his role as the first physician to head HHS. At the conference, which was in Chicago Feb. 20-22, Dr. Bowen spoke from prepared comments about the Reagan Administration's efforts to control the rising costs of Medicare. He pointed out that "the major demographic problem inherent in our entitlement program still exists," explaining that: "In 1965, there were 20 million elderly; by 1985, there were 30 million; by 2010, there will be 60 million." He added: "If we are to meet the present commitments of our entitlement programs, without expanding them for any new medical procedure, we will devote 67% of the entire federal budget to the elderly by 2010."

(Continued on page 11-A)

20
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Cardiovascular contraindications to the use of Isoptin are similar to those of beta blockers: severe left ventricular dysfunction, hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no artificial pacemaker is present) and second- or third-degree AV block.

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Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C:* There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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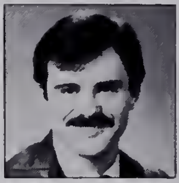

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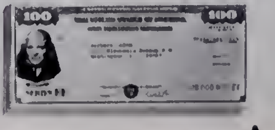

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Harrison L. Rogers, Jr., M.D.

President of the American Medical Association

Harrison L. Rogers, Jr., M.D., a general surgeon from Atlanta, GA, will be the speaker at the 1986 Inaugural Banquet at 7:30 p.m. on Sunday, April 27. The Banquet will be held in the Grand Ballroom at the Omaha Marriott.

His speech topic will be "Future Directions of Health Care".

Dr. Rogers brings a rich background of medical and medical association experience to his position. His direction is helping organized medicine move confidently through this period of change and transition.

You will want to share the experience of his presentation with your colleagues. Be sure to reserve the date now.

AMA News Notes

(Continued from page 6-A)

Dr. Bowen outlined some of his department's plans. "With regard to physician reimbursement, we propose some interim measures. We will reduce certain high-priced procedures, such as pacemaker implants. We intend to consolidate the different 'localities' upon which different payments are based," he said. Over the longer term, Dr. Bowen said, "we are looking at capitation as one method of reforming physician and other provider payments. To put the provider, rather than the government, at financial risk, is a principle that is attractive — and consistent with the operation of almost every other industry in America."

Dr. Bowen also said his experience as a physician had served him well. "Sometimes I think that there is nothing here in Washington, or at HHS, that a good swig of caster oil and a few leeches couldn't cure," he said.

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Immanuel Medical Center

ONCOLOGY FELLOWSHIP PROGRAM — MAY 8-9, 1986

A two-day continuing education program in Oncology for primary care physicians will be held at Holling Education Center, Immanuel Medical Center, May 8-9, 1986. This program is designed to enhance physician's diagnosis, treatment and follow-up skills in dealing with the most prevalent oncology diagnoses. Continuing Medical Education (CME) credits are offered for participation in the program.

Spouses are invited to participate in special activities; participants and faculty will enjoy an evening of elegant "dining out" together on Thursday, May 8. Participants are housed at the beautiful new Immanuel Plaza Motel on the Medical Center campus.

An agenda for the two-day program is as follows:

First Day

Introduction to Cancer
    John B. Davis, M.D.
Principles and Treatment of Cancer:
  Radiation Oncology
  Chemotherapy
    David J. Harter, M.D.
    Herbert A. Hartman, Jr., M.D.
Imaging Modalities
    Paul Bender, M.D.*
    W. Benton Copple, M.D.*
Primary Oncologic Emergencies
    Anton F. Piskac, M.D.
    James H. Wigton, M.D.
Colon Cancer Update
    Mark Christensen, M.D.*
    Alan G. Thorson, M.D.*
Tumor Markers
    Thomas A. Ruma, M.D.
The Black Spot - Malignant Melanoma
    John F. Latenser, M.D.
Lung Cancer Update
    Leonard Moss, M.D.
The Role of the Family Physician in the Treatment of Cancer
    Ronald C. Bell, M.D.
Tour of Radiation Oncology

For more information on this or future Fellowships, contact Marion Kaple, Holling Education Center, Immanuel Medical Center, 6901 North 72nd Street, Omaha, Nebraska 68122, (402) 572-2340.

Second Day

Tumor Conference
  John B. Davis, M.D., Moderator
  Panel — Medical Staff representing Hematology Medical Oncology, Pathology, Gynecology, Surgery, Radiology, Urology, General Family Practice, Internal Medicine
Gynecologic Tumor
    Terrence J. Kolbeck, M.D.
Chronic Lymphatic Leukemia
    John R. Feagler, M.D.*
    Joseph D. Verdirame, M.D.*
Multiple Myeloma
    John R. Feagler, M.D.*
    Joseph D. Verdirame, M.D.*
Control of Pain in the Cancer Patient
    David J. Harter, M.D.
Skin Tumor, Diagnosis and Treatment
    John F. Latenser, M.D.
Breast Cancer Update
    James R. Commers, M.D.
    Thomas M. Conners, M.D.
    David J. Harter, M.D.
Cancer Screening in the Physician's Office
    William A. Shiffermiller, M.D.
Prostatic Carcinoma
    Stewart E. Sloan, M.D.*
    Gerald C. Felt, M.D.*
Liver Pumps and Hickman Catheters
    Thomas Connors, M.D.
Follow-Up of Cancer Patients
    Herbert A. Hartman, Jr., M.D.

Jerald R. Schenken, M.D.

"IS THERE A MEDICARE IN OUR FUTURE?"

Hear Jerald R. Schenken, M.D., address this topic at the NMA Annual Session Breakfast Meeting, Sunday, April 27, 1986, 8:00 a.m. at the Omaha Marriott Hotel.

Doctor Schenken is a member of the AMA Board of Trustees and will be bringing us the latest information on Medicare.

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AMA News Notes

General Motors Chairman Roger B. Smith announced at the AMA National Leadership Conference that GM would offer air bags as a safety option on selected models beginning in 1988. "We're offering this system in response to what we think our customers want — rather than in response to a government mandate — and that's the way it ought to be," Smith said.

He urged the AMA to support passage of mandatory safety belt laws, saying, "One sure way to achieve an immediate reduction in accident injuries and fatalities is to get more people to use the safety belts already in their cars." The AMA presently supports mandatory seat belt laws that do not simultaneously relieve automobile manufacturers of their responsibility to install passive restraints. Smith noted that "there are no known medical exemptions that would justify advising a person not to war safety belts — and that includes pregnant women."

In his speech at the opening session, of the leadership conference, Smith also addressed health care issues affecting GM — which has a health care program that reaches two million people, or 1% of the population of the United States. He outlined the ways GM is seeking to contain the costs of its health care program. "Working jointly with the United Auto Workers (UAW) and other unions, GM has launched several programs aimed at improving health care quality and reducing costs — such as predetermination for hospitalization and length of stay, second opinions for surgery, and mail-order prescription drugs," Smith said.

He added that one of the most promising ways to contain costs is through managed health care programs. GM and the UAW offer a managed health care program called the Informed Choice Plan. Smith explained that the program provides three health care options for GM employees and retirees: traditional coverage, PPOs, and HMOs. "We now have

(Continued on page 26-A)

AMERICAN MEDICAL INTERNATIONAL'S PHYSICIAN PLACEMENT SERVICE

American Medical International has instituted a new corporate service to assist Physicians interested in solo or group practice opportunities servicing AMI hospitals. Current opportunities are available for physicians who are Board Certified or Eligible. Specific areas of interest are:

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- Neurologist
- Neurosurgeon
- OB/GYN
- Ophthalmologist
- Orthopedic Surgeon
- Pediatrician
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- Thoracic Surgeon

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AMI

For detailed information and a confidential meeting while attending the 118th Annual Session, please contact the AMI Interview Suite at the Omaha Marriott, (402) 399-9000.

PHYSICIAN'S RECOGNITION AWARD

The American Medical Association understands how valuable your time is. We know there aren't enough hours in the day for doctors to do everything they want to do for their patients, community, family, friends, and themselves.

That's why we appreciate the efforts of many physicians to continue their medical education. These dedicated physicians find the time to expand their knowledge and improve their skills through continuing medical education.

In recognition of this continued achievement, the AMA is pleased to offer the *Physician's Recognition Award.* Displayed on the walls of your office or home, it is a symbol of your commitment to providing the best medical care possible.

You will be receiving an application for the *Physician's Recognition Award* in the mail shortly. We encourage you to participate in this program.

AMA
AMERICAN MEDICAL ASSOCIATION

THE NEBRASKA MEDICAL JOURNAL

Business of Medicine vs. Medicine as a Business

V. WILLIAM MEYERS, M.D.*
Medical Director, Bergan Mercy Hospital, Omaha, Nebraska 68124
FRAN HOBER, R.R.A.
Director of Quality Accountability, Bergan Mercy Hospital, Omaha, Nebraska 68124

THE obesity of the traditional business of medicine reflected the art and science of the profession, unlimited access and financing for patient care, and to do everything possible regardless of cost for intended outcomes. The providers (hospitals and physicians), defined as the production managers, were rewarded for increased use of services.

The diet and roots of medicine as a business began sprouting in the '70's with the introduction of models of health care delivery, all having the added objective of efficient use of resources for similar outcomes. Major government legislation with the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 helped to create the appropriate incentives in the private sector health benefit plans to fertilize the growth of the prospective systems.

Tables I and II reflect regional utilization of hospital resources through the year 1982, which was a benchmark year. They summarize the business of medicine and the early results of medicine as a business, particularly in the west where prospective reimbursement systems had been regionally active.

Regional case mix evaluation of community hospitals' [1] population for the most frequent 25 DRG's shows a relative consistent pattern nationally. Variations in frequency of principal diagnoses is a result of the function of hospitals' focused specialization. The variances of length of stay nationally for these spells of illness does not appear to be on the basis of severity of illness. Thus, the tables reflect regionally less resources are consumed for similar outcomes. Therefore, the prevailing incentives for decreased utilization of expensive environments and the availability and use of non-traditional environments for delivery of health care must account for the wide disparity in regional resource utilization.

Early prospective payment activity in the west, strength of labor for all inclusive health benefit packages, state statute rate setting which rewards the inefficient and penalizes the efficient, the inattention of industry to the economic incentives of their health benefit plans, and the elements of the business of medicine are the major considerations for this historical performance of the production managers.

TABLE I
1982

	Hospital Days Per 1000 All Ages	Medicare Los	Under 65 Los
United States	1,044		
Northeast	1,190	12.3	6.4
North Central	1,206	10.7	6.7
South	1,000	9.4	5.7
West	752	8.3	5.1

TABLE II

HOSPITAL DAYS/1,000 POPULATION
1982

	Medicare	Under 65
Northeast	4,707	881
South	3,951	864
North Central	4,604	1,038
West	3,356	637

Medicine as a business dictated by a financial imperative, market orientation, and wide variations in regional utilizations created a large window of opportunity that has yet to

*For Reprints: V. William Meyers, M.D., Medical Director, Bergan Mercy Hospital, 7500 Mercy Road, Omaha, Nebraska 68124.

close for the entrance of the entrepreneur. Evidence through 1984 shows that there has been attrition to the numbers reflected in 1982.[2] Other current data [3] reflects the known performance of five voucher Medicare programs and the Kaiser Medicare program. Use of hospital services in these programs were 1,851 days per thousand population. For the non-Medicare group in communities where aggressive prospective reimbursement is maturing, it is not unusual for use of hospital days of care per thousand population to be 500 days or less.

The traditional premium base, measured against similar goals of performance and of utilization of health care services, frees up a tremendous amount of capital. For Medicare, by 1995 with all other assumptions being the same, the health insurance trust would have a 260.9 billion dollar surplus. The Non-Medicare portion has not been measured.

Proliferating and equity oriented organizations have seized upon the potential earning stream available and are moving into these areas based upon regional variations of utilization, eventually to coalesce after networking autonomous groups and organizations into a small number of national companies for additional economies of scale. Their ultimate goal is control of the distribution channel, the physicians who deliver health care services. Independent hospitals without, or with a limited distribution channel, will be severely compromised for survival.[4]

The efforts of the entrepreneurs in constricting the size and utilization of the traditional health care model has so far resulted in one third of every health care dollar moving to Wall Street, [5] the equity market. Education, research and development, local, state and federal taxes for entitlement programs will be the losers in this effort. These dollars will probably not return as a reinvestment to the delivery system or to the health of the nation. Entrepreneurs and growth companies do not like status quo. One can predict by the rapidity of change that their goal of freeing up and shifting capital through reducing frequency of units of service and use of less expensive environments could reach an end in five to seven years. The production managers will then return in the '90's with the following issues: escalating costs per unit of service, under-utilization for quality, and allocation of finite resources for life-sustaining and life-enhancing patient care.

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Results of Treatment of Chronic Pain at a Multidisciplinary Pain Center

F. MILES SKULTETY, M.D., Ph.D*
PHILIP W. MEILMAN, Ph.D.
THOMAS P. GUCK, Ph.D.
BRADLEY M. BERMAN, M.D.
Nebraska Pain Management Center, University of Nebraska Hospital and Clinic, 42nd and Dewey Avenue, Omaha, Nebraska 68105

THERE is a significant difference between acute and chronic pain. Acute pain is ordinarily a symptom of an underlying organic problem and may be expected to end following control of the disease process or repair of tissue damage. Chronic pain, although it may begin in a similar manner, ultimately bears less and less relationship to the underlying organic problem. Many of the traditional approaches such as medication, surgery, hospitalization, rest, and inactivity may actually exacerbate the problem to the point of disabling the chronic pain sufferer. The gradual recognition of this problem led to the development of non-traditional approaches to the treatment of chronic pain by Fordyce and others in the late 60's and early 70's.[1-4] At the present time the numerous pain programs range from those employing a strict operant conditioning approach to multidisciplinary programs employing various combinations of traditional modalities and behavioral modification.

The Nebraska Pain Management Center accepted its first patients in February 1973. It has always been a multidisciplinary program using multiple behavioral and physical modalities based on our conviction that pain is a complex psychophysiologic phenomenon. The behavioral portions of the program have evolved from a strict operant conditioning approach to a more cognitive, holistic approach. All pain medications, non-narcotics, narcotics, and psychotropics are disguised and given on a time contingent basis. The dose is gradually reduced until the medication is finally eliminated prior to discharge.

Demographics

The information to be presented is based on 559 patients admitted between February 1973 and February 1982. There were 271 men (48.5%) and 288 women (51.5%) and 82% were married. The mean age was 43 and the median 42 years (Figure 1). Seventy-four percent were listed as unemployed at the time of admission. Table 1 lists the discharge diagnosis. The greatest number of patients had back and/or leg pain. Individuals with complaints of multiple pains such as back and leg and headache were listed in the "other pain" category.

FIGURE 1
Distribution by age of 559 patients admitted to the Nebraska Pain Management Center between February 1973 and February 1982.

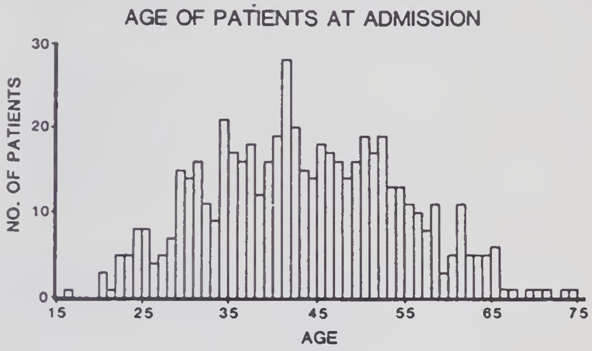

TABLE I
Discharge Diagnoses

Diagnosis	Number	Percent
Back pain	96	17.2
Leg pain	23	4.1
Back and leg pain	217	38.8
	336	60.1
Neck pain	5	0.9
Arm pain	15	2.7
Neck and arm pain	14	2.5
	34	6.1
Headache	27	4.8
Abdominal pain	8	1.4
Other pains	154	27.5

*Reprint Requests: F. Miles Skultety, M.D., Ph.D. Department of Neurosurgery, University of Nebraska College of Medicine, 42nd and Dewey Avenue, Omaha, Nebraska 68105.

The duration of pain prior to admission ranged from less than six months in six patients to 50 years in one. The mean duration was 62 months, but the median was only 32 months. The majority of patients had their pain for three years or less (Figure 2). Only 9.5% had never been hospitalized for the pain problem which prompted admission to the program and 48% had been hospitalized three or more times. Table 2 reveals that the greatest number of patients were hospitalized one to three times, but a significant number had four to six previous hospitalizations. Table 3 lists the number of operations patients had for their pain problem. Forty-four percent had none and 15.5% had three or more.

Results of Treatment

The goal of treatment at the Nebraska Pain Management Center is to have patients accept responsibility for their own well being and return to meeting their normal work, personal, recreational, and social needs without allowing pain to interfere. At the time of discharge, patients are evaluated by the staff with respect to how well they have met this goal. They are rated by consensus as failure, poor, fair, or good. Eighty-three (15.8%) left before completing the program, 1.3% were rated as failure, 8.9% as poor, 30.4% as fair, and 43.5% as good at the time of discharge. All patients are given an appointment to be seen for follow-up approximately one month after discharge. About 75% of patients kept these appointments Most of those who were doing well at discharge returned and most of those who were doing poorly did not. In general those who did return were rated by the staff in the same categories as at the time of discharge.

TABLE II
Hospitalizations for Pain Problem Prior to Admission to Pain Program

No. of Hospitalizations	No. of Patients
0	53
1	102
2	134
3	93
4	68
5	44
6	20
7	12
8	6
9	1
10	9
11	3
12	1
15	2
17	1
20	5
23	1

Follow-up questionnaires were sent to all patients who completed the program approximately every six months following discharge. A total of 669 questionnaires was returned through February 1983. No questionnaires were returned by 51.5% of the patients and

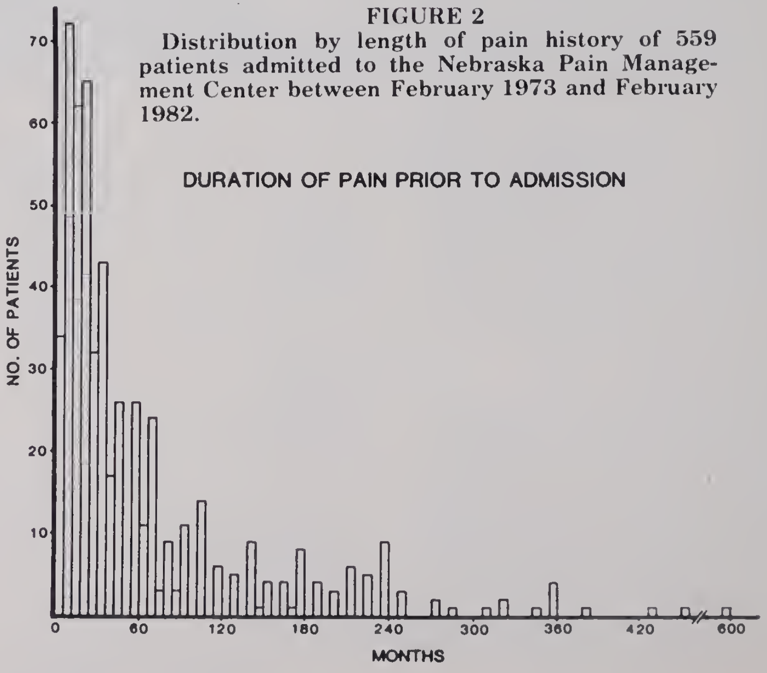

FIGURE 2
Distribution by length of pain history of 559 patients admitted to the Nebraska Pain Management Center between February 1973 and February 1982.

48.5% returned at least one. Table 4 shows the response rate of all patients.

In an attempt to obtain information about the patients as long after discharge as possible, the last or latest questionnaire returned by each patient was analyzed. There were 274 questionnaires. The entire follow-up period was divided into eight time segments. Table 5 shows the total number of questionnaires returned and the number of last questionnaires returned in each time segment.

TABLE III

Operations for Pain Problem Prior to Admission to Pain Program

No. of Operations	No. of Patients
0	244
1	126
2	93
3	49
4	21
5	5
6	5
7	2
8	2
10	1

TABLE IV

Number of Follow-up Questionnaires Returned

No. of Questionnaires	No. of Patients Returning Questionnaires	Percent
0	288	51.5
1	108	19.3
2	57	10.2
3	43	7.7
4	26	4.7
5	17	3.0
6	13	2.3
7	5	.9
8	2	.4

TABLE V

Questionnaires Returned in Each Time Period

Time Since Discharge	No. of Questionnaires Returned	No. of Last Questionnaires Returned
2-9 months	218	74
10-17 months	115	44
18-29 months	117	43
30-41 months	81	37
42-53 months	66	30
54-65 months	39	21
66-77 months	24	19
78-89 months	9	6
	669	274

For the purpose of pain management, any drugs which patients take to modify pain are considered as pain medication. These were recorded in three broad categories: non-narcotic, narcotic, and psychotropic. If a patient was taking a combination drug, it was recorded in each appropriate category. A patient taking Tylenol #3 would be credited with taking a non-narcotic and a narcotic drug. From information obtained in the last returned questionnaires, reduction of drug intake was significant. Table 6 shows the comparable figures for time of admission and follow-up. At the time of admission to the program, only 12.1% were taking no pain medications, whereas at follow-up 46.7% were taking none. The percentage of individuals taking multiple drugs decreased significantly. It appears that those who still were taking pain medication shifted to non-narcotics since the actual percentage increased in the follow-up data.

TABLE VI

Comparison of Drug Use at Admission with Drug Use at Follow-up

Medication	% of Patients at Admission	% of Patients at Follow-up
None	12.1	46.7
Non-narcotics only	9.9	17.6
Narcotics only	6.0	3.1
Psychotropics only	4.0	5.0
All three	26.5	8.0
Any two	41.5	19.5

Information obtained from the questionnaires appeared to indicate that former patients were using the health care system less. Seventy-four percent were not hospitalized for their pain problem after treatment as compared to only 9.5% who had not been hospitalized prior to treatment. In addition, only 5% were hospitalized three or more times after treatment compared to 48% who had been hospitalized three or more times prior to treatment. As to surgery, 93% reported no operations for their pain after treatment compared to only 44.5% prior to treatment. After treatment 6.5% had one operation and one patient had two; before treatment 23.9% had one, 17% had two, and 15.5% had three or more operations for their pain.

Although we believe that treatment at the pain center contributed significantly to this reduction in hospitalizations and operations, we recognize that there are other factors which may be equally significant. Even if a patient had not been through the pain program and had persistent pain, further hospitalization or operation might not have occurred since it would not have been considered appropriate. A treated patient may have had this pain for a considerably longer time prior to treatment than the follow-up time thereby providing more opportunities for hospitalization or operation before treatment than after.

Each of 274 last returned questionnaires were reviewed and rated independently by three individuals (FMS, PM, TG). As described earlier, failure, poor, fair, and good were the four ratings used to indicate the degree to which the subjects had returned to a healthy productive lifestyle. Final ratings were assigned to individual patients by comparing the three staff ratings. A rating was assigned if there was consensus among the three raters or if two agreed and the third was not off by more than one rating category in which case the majority prevailed. Inter-rater reliability was good at .79, .90, and .92. If there was no consensus, the questionnaire was reviewed and discussed by the three and a final rating agreed upon. This was rarely necessary.

Overall, 50.3% of the questionnaires were rated as failure or poor and 49.7% were rated as fair or good. However, reference to Table 7 reveals somewhat more failure or poor ratings in the earlier than in the later time periods. Since we were rating the last questionnaire returned, it would appear that individuals who were doing well tended to continue to respond, whereas those who were doing poorly did not.

In an effort to determine if this assumption was true, all of the questionnaires returned rather than just the last one were rated on 61 individuals who had returned four or more. This provided an opportunity to determine which type of patient returned more than one questionnaire and whether individuals tended to remain stable, improve, or get worse. Eight patients had been discharged from 24 to 40 months and 53 from 4 to 9 years. Thirteen maintained the same ratings and 27 maintained ratings which were within two contiguous categories. Of these, 9 were rated as failure or poor, and 26 as fair or good. The other 5 were rated as poor or fair. The remaining 21 had ratings which varied over 3 or 4 categories. Of these, 8 had mostly failure or poor ratings, 10 had mostly fair or good, and the other 3 varied over all 4 categories. On the basis of this information, we concluded that patients tended to maintain their results, good or bad, over time and those who were doing well continued to return questionnaires more than those who were doing poorly.

Patients were asked to estimate percent of pain and disability relief. These estimates are very subjective at best and have decreasing reliability the longer it has been since the patient was treated. Estimates tended to cluster at 0, 50, and 100 percent. Sixty-three percent of individuals reported 50% or more pain relief and 61% reported 50% or more disability relief. These bore little or no correlation to each patient's estimate of the percent of his work needs that he met, and overall 80% estimated that they met 50% or more.

There are some pain programs which will not accept patients who are involved in litigation or receiving compensation. We have not had any such restrictions and were interested in whether or not these situations effected outcome. Sixty-five percent of individuals receiving compensation were rated as failure or poor on the questionnaires and 35% as fair or good. Conversely, 37% of those not receiving compensation were rated as failure or poor and 63% were rated as fair or good. Similarly, 62%

TABLE VII

Rating of Patients on Last Questionnaire

No. of Questionnaires Rated Per Time Period

	2-9 months	10-17 months	18-29 months	30-41 months	42-53 months	54-65 months	55-77 months	78-89 months
Failure	25	16	10	7	7	3	3	0
Poor	9	10	11	13	4	5	5	0
Fair	15	12	16	6	9	6	0	3
Good	15	6	6	11	10	7	6	4
	74	44	43	37	30	21	19	7

of those involved in litigation were rated as failure or poor and 38% as fair or good, while 40% of those not involved in litigation were rated as failure or poor and 60% as fair or good. Therefore, it appears that compensation and litigation do have an adverse effect on outcome.

Discussion

We have demonstrated that approximately 50% of individuals who complete the Nebraska Pain Management Program receive long-term significant benefit. We consider this to be a good treatment result since we only take patients who have failed to respond to traditional modes of therapy. We recognize several inherent problems in this type of study. There is a low rate of return from mailed questionnaires raising the possibility that the information is biased since we have no knowledge about those who did not return questionnaires. Also, the accuracy of the data is questionable since it is entirely subjective and there is no corroborative objective information. Lastly, there are no untreated controls for comparison. We did have the opportunity to conduct a controlled study comparing 20 treated to 20 untreated individuals followed for one to five years.[5] Sixty percent of the treated group met all of the criteria for successful outcome as defined by Roberts and Rinehart,[6] whereas none of the untreated group did. In 1983, 56 patients who had been treated 18 months to 10 years previously were interviewed in their home situation by a trained research assistant. [7] This provided more extensive and objective information than that gained from questionnaires. The results were essentially the same as those based on information from the mailed questionnaires. Most patients had a signficant decrease in the use of pain medication and 50% of them were rated as fair or good and 50% as failure or poor.

Summary

The information obtained from questionnaires has demonstrated that 50 percent of patients who completed treatment at the Nebraska Pain Management Center returned to a healthy productive lifestyle. There was a reduction in the use of pain medication and repeat hospitalizations or operations. In general, the results of treatment, good or bad, remained stable over time.

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Neuroleptic Malignant Syndrome

THE Neuroleptic Malignant Syndrome (NMS) is a potentially fatal complication of neuroleptic therapy and was first described in 1968 by Delay and Deniker.[1] Although initially believed to be rare, it has been recognized more often in the recent years. Most recent estimates put the incidence of NMS as high as 1% among those receiving the neuroleptics. It is characterized by hyperthermia, muscular ("leadpipe") rigidity, disordered autonomic function and mental status alteration. The syndrome affects all ages and both sexes.

MUJEEB H. KHAN, M.D.*
Chief Resident, Department of Psychiatry
HUDSON H. HSIEH, M.D.
Assistant Professor and Director Consultation and Liaison Psychiatry
MANMOHAN SINGH, M.D.
Senior Resident

From the Department of Psychiatry, Creighton University School of Medicine, Omaha, Nebraska 68108

Case Report

A 48-year old Caucasian male with a known history of Bipolar Disorder was admitted to a psychiatric hospital in an acute manic phase. His wife reported that for the past few days he had been manifesting aggressive and boisterous behavior.

He had not been sleeping for the preceeding two days and reportedly had not been on any psychotropic medication for the past several months.

On mental status examination he exhibited hyperactive behavior, grandiose and expansive mood with marked labile affect. His speech was loud, pressured and he manifested classical flight of ideas. His thought content showed marked grandiose delusions. He was oriented to time, place, and person.

On admission his medical history, review of systems, physical examination and laboratory work-up were unremarkable.

He was given 10 mg po thiothixene concentrate without any significant response. He underwent rapid neuroleptization with thiothixene 10 mg IM every hour for total dose of 30 mg with favorable improvement in his agitation. He was then switched to thiothixene 20 mg. po q.i.d. and lithium carbonate 300 mg. po q.i.d. was added to the regimen. On the third day, the dosage of thiothixene was cut down to 50 mg/day because of steadily improving mental status.

On the fifth day he started getting mildly confused, diaphoretic and manifested moderate "lead-pipe" rigidity of the upper limbs and severe bradykinesia. He was given an adequate therapeutic trial of benztropine without any significant improvement. His mental status showed rapid deterioration and he became markedly confused and grossly disoriented in all spheres.

He became profusely diaphoretic and showed fluctuations in his blood pressure, tachycardia and rise in temperature up to 101 F. Lithium level at that point was 0.7 meq/L (normal 0.6-1.4 mgq/L). His laboratory work-up showed a white cell count of 17,300 without a left shift; total CPK was 698 (normal 30-180 IU/Liter). Liver function tests and serum electrolytes were normal.

Medicine and neurology consultation was requested and he was transferred to the medical intensive care unit. Psychotropic medications were immediately discontinued and thorough laboratory work-up was undertaken. Blood cultures, chest x-ray, electrolytes, liver function tests, CT scan of the head, lumbar puncture and CSF examination was unremarkable. EEG showed diffuse slowing consistent with generalized encephalopathy.

He was maintained on IV fluids with careful monitoring of serum electrolytes, renal, respiratory and cardiovascular status. He showed steady improvement on conservative manage-

*Reprint Requests: Mujeeb H. Khan, M.D., Creighton University School of Medicine, Department of Psychiatry, 819 Dorcas, Omaha, NE 68108 Tel: (402) 449-5047.

ment; his mental status returned to that on admission with return of vital sign and laboratory values to the baseline by seventh day in the Intensive Care Unit.

He was transferred back to the psychiatric unit and his manic symptomatology was subsequently well controlled with lithium carbonate.

Discussion

NMS can be broadly defined as the clinical triad of fever, movement disorder and altered mentation with fever being the hallmark of NMS. Parkinsonism is the predominant movement disorder and rigidity is present in 90% of cases. The most common manifestation of altered mentation is delirium-like picture.[2] The reported clinical features and list of differential diagnoses are mentioned in Table I and Table II respectively.

Various antipsychotic drugs have been implicated as the causes of NMS. The drugs most frequently implicated are haloperidol, fluphenazine, chlorpromazine, levopromazine trifluperezine, thioridezine, loxapine and thiothixine in that order of frequency.[2,5] What is reasonably certain is that NMS is due to striatal and hypothalmic dopamine blockade or hyporeactivity.[6]

In 90% of the cases the onset of NMS occurs within 2 weeks of initiating neuroleptic therapy or increasing the dosage. Until recently, there has been no proven or consistently effective treatment for NMS. Conventional anti-cholinergic drugs have been ineffective. There have been isolated case reports of favorable response to amantadine hydrochloride[7-8] and a single case report of successful outcome with ECT.[9]

In the recent years, there have been several reports that dantrolene has been beneficial in the treatment of NMS,[10-12] plus several reports of good response to bromocriptine 5-20 mg three times daily.[12-15]

With prompt recognition and treatment most patients with NMS recover within 10-14 days. However, even with adequate treatment the mortality rate is estimated to be around 12-20%. The leading causes of mortality are myoglobinuria leading to acute renal failure,[16] thromboembolism, coagulopathy, aspiration pneumonia, hypoventilation, anoxia and cardiovascular collapse.[17, 18] Our case presented a classical picture of NMS with hyperthermia, delirium and "lead-pipe" rigidity. Prompt discontinuation of the neuroleptics and aggressive intensive care treatment was beneficial.

Table II

SIGNS AND SYMPTOMS OF NMS

I. Autonomic Dysfunction

- Fever
- Pallor
- Tachycardia
- Flushing
- Excessive Perspiration
- Labile Blood Pressure
- Urinary Incontinence
- Tachypnea

II. Mental Status Disturbances

- Confusion
- Lethargy
- Agitation
- Stupor Coma

III. Neurological and Movement Dysfunctions

- Rigidity
- Tremor
- Bradykinesia
- Dystonia
- Chorea
- Oculogyric Crisis
- Blepharospasm
- Dysarthria
- Mutism
- Dysphagia
- Hypo and Hyper Reflexia
- Nystagmus
- Ataxia
- Seizure
- Extensor Planter Responses

IV. Laboratory Abnormalities

- Elevated CPK
- Elevated white cell count
- Pulmonary Infiltrates
- Disturbed liver function tests

Table I

IMPORTANT CONDITIONS IN THE DIFFERENTIAL DIAGNOSIS

I. Psychiatric Conditions

- Stauder's Acute lethal Catatonia
- Catatonic Schizophrenia
- Hysterical rigidity

II. CNS Disorders

- a. Infections -
  - viral, bacterial, fungal, parasitic, post-infectious encephalopathy, encephalitic lethargica
- b. Neuromuscular/Extrapyramidal -
  - Parkinsonism
  - Shy-Drager's Syndrome
  - Acute dystonias and dyskinesias
  - Tetany and Tetanus
  - Decerebrate rigidity
  - Decorticate rigidity

III. Others

- Malignant Hyperthermia Associated with Anesthesia
- Heat Stroke
- Drug Reactions e.g. Drug Interactions with Monoamine oxidase inhibitors
- Central Anticholinergic Syndrome
- Auto-Immune Disorders

Conclusion

The NMS is an underdiagnosed but potentially lethal complication of neuroleptics. Accurate diagnosis, immediate discontinuation of neuroleptic drugs and rigorous supportive therapy are critical for a successful outcome. In addition, judicious use of the central dopaminergic drugs like bromocriptine seems warranted because of our understanding of the pathogenesis of this disorder and recent reports of the successful outcomes with this drug.

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Angiosarcoma of the Breast: A Case Report and Review of the Literature

JOHN B. DAVIS, M.D.
Clin. Associate Professor of Surgery-UNMC

THE first description of angiosarcoma of the breast was by Schmidt in 1887.[1] Since then a number of names have been applied to this lesion: benign metastasizing hemangioma,[2] angiosarcoma,[3] hemangioendothelioma,[4] hemangioblastoma,[5] and hemangiosarcoma.[6] The last term probably best describes this tumor as it is malignant and arises from the vascular endothelium of the mammary parenchyma.[7]

Some of these cases were first misdiagnosed as being benign only to have them later metastasize.[8] Now vascular tumors of the breast, with the exception of perilobular hemangiomas, are generally considered to be malignant.[9] According to Stewart, a benign angioma has never caused a palpable or symptom producing breast tumor.[10]

There are now 159 published reports of angiosarcoma of the breast[11] to which this case will be added.

Case Report

Mrs. J. S., age 24, found a thickening in her right breast while showering December 20, 1978. The next day a physician found a distinct mass in her right breast. She then consulted her own physician who had examined her breasts July 7, 1978 as part of a general physical examination and recorded that no breast masses were present.

The patient had two children age one and three years and had been on birth control pills for the past year. A maternal aunt had bilateral breast cancer in her fifties and a maternal grandmother had bilateral breast cancer in her seventies.

On physical examination the breasts were large and symmetrical. There was a readily palpable, deep-seated, 5 cm. in diameter, moveable, non-tender mass in the upper inner zone of the right breast. There were no other masses in either breast and no palpable regional nodes. There was no discoloration of the skin and no nipple discharge.

The patient was advised to have the mass biopsied and, if cancer was found, a mastectomy. She agreed to a biopsy only and insisted on pre-operative mammograms.

Bilateral mammography showed dysplastic changes in both breasts but no mass was identified. The palpable mass was biopsied December 26, 1978. It measured 2.5 cm. in diameter and was grossly hemorrhagic and edematous. Frozen sections were done revealing a well-differentiated angiosarcoma and permanent sections later confirmed this.

A right simple mastectomy with removal of some lateral axillary nodes was done December 29, 1978. The nodes were free of tumor.

The patient has remained clinically free of recurrent or residual tumor through July 1985. and delivered her third child in 1983.

Discussion

Angiosarcoma is considered by many to be the most malignant tumor of the breast with the mean survival after diagnosis of 1.9 to 2.1 years.[11] There are now 20 case reports of 5 year survivors who are free of disease,[11] including the one reported in this paper.

In 1950 Stewart found one case of angiosarcoma in every 2000 to 3500 breast cancers.[12] Among breast sarcomas the incidence of angiosarcomas has been reported as 8%, but its incidence is only 0.04% among all malignant breast tumors.[13]

It occurs almost exclusively in women with only two cases reported in males.[3, 14] It is most frequent in women in the third and fourth decades of life and there is a high rate of contralateral breast involvement.[15]

In most cases the mass has grown rapidly,[7] is painless, rarely pulsatile, and usually deeply seated in the breast with poorly defined margins.[13] When the lesion is near the surface, bluish, reddish, violacious, or black discoloration of the skin has been noted.[15] Enlarged axillary nodes are rare and only three cases of histologically documented axillary nodes metastases have been reported.[11] Tumor dissemination occurs early via the blood steam to the lung, skin and subcutaneous tissue, bone, liver, brain, and ovary in that order of frequency.[15]

The only successful curative treatment for angiosarcoma of the breast is early and complete surgical excision. Simple mastectomy is generally the procedure of choice.[11] Chemotherapeutic agents and radiotherapy, alone or in combination, have been ineffective with no significant improvement in survival.[16]

Tumor size and the degree of tumor differentiation are the important prognostic determinants. The majority of long term disease-free survivors had lesions less than 4 cm. in size and were well-differentiated.[11, 17]

The case reported here emphasizes that a palpable breast mass should be biopsied even whem mammography is negative.

Conclusions

Angiosarcoma of the breast, a rare but often fatal disease, most commonly affects women in their child bearing years. Mammography may fail to identify the tumor. Only small well-differentiated lesions treated by adequate surgical removal are cureable, so early diagnosis is imperative. Metatases to lymph nodes is rare, so simple mastectomy is usually advised.

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SPECIAL ARTICLE

Baby Doe — The Saga Continues

L. EGGERT
K. SHAFFER
L. BAUSCH
Fetus and Newborn Committee,
Nebraska Chapter A.A.P.

THE final rules and regulations governing the Child Abuse and Neglect Prevention and Treatment Program were published almost a year ago (DHHS 45 CFR Part 1340, Federal Register, Vol. 50, No. 72, Monday, April 15, 1985, pp. 14878-14901). Those rules became effective May 15, 1985.

As a condition of receiving state grants under the Child Abuse Prevention and Treatment Act, states had to establish programs and/or procedures within the state's Child Protective Service (CPS) system to respond to reports of medical neglect, including reports of the withholding of medically indicated treatment for disabled infants with life-threatening conditions. State CPS agencies were designated as the responsible agency to respond to reports of child abuse and neglect. Anyone in a state may report known or suspected abuse and neglect. Investigations, services and other activities may be provided by CPS agency staff or by other public and voluntary agencies in the community.

The rules stipulate that anyone at any time may report cases of known or suspected abuse or neglect to the local CPS agency. In responding to such reports, CPS agencies are to coordinate and consult with individuals designated by and within the hospital in order to avoid unnecessary disruption of ongoing hospital activities.

CPS workers are not to "practice medicine or second-guess reasonable medical judgments." To this end, each CPS agency is encouraged to develop mechanisms to provide for coordination and consultation with local health care facilities and other organizations (such as medical societies).

Hospital Infant Care Review Committees (ICRC) are not mandated by the rules. The use of such committees, though encouraged, is voluntary. ICRC's, where utilized, should review the case, provide additional information as needed to ensure fully informed decision-making, particularly in difficult cases, and recommend that the hospital seek CPS agency involvement when necessary to assure protection for the infant and compliance with applicable legal standards.

For FY 1985, Congress provided funds under the act in the amount of $5 million to assist states to implement these rules.

"Withholding of medically indicated treatment," as defined within these rules, means the failure to respond to an infant's life-threatening conditions by providing treatment (including appropriate nutrition, hydration, and medication) which, in the treating physician's reasonable medical judgment, will be most likely to be effective in ameliorating or correcting all such conditions. Exceptions to the requirement to provide treatment (but not appropriate nutrition, hydration, and medication) may be made in cases in which:

(1) The infant is chronically and irreversibly comatose; or

(2) The provision of such treatment would merely prolong dying or not be effective in ameliorating or correcting all of the infant's life-threatening conditions, or otherwise be futile in terms of the survival of the infant; or

(3) The provision of such treatment would be virtually futile in terms of the survival of the infant and the treatment itself under such circumstances would be inhumane.

On September 30, 1985, Dr. Kenton Shaffer, on behalf of the Committee on Maternal and Child Health of the Nebraska Medical Association and the Fetus and Newborn Committee of the Nebraska Chapter of the American Academy of Pediatrics, notified the Nebraska Department of Social Services (DSS) that an Ad-Hoc Resource Committee had been formed to offer assistance to DSS in evaluating cases of suspected medical neglect of infants born with a handicapping condition. This committee was composed of actively practicing pediatricians, neonatologists, a family practitioner and a medical geneticist. Further subspecialists would be available to the committee as needed for individual case reviews.

Gina Dunning, state director of the DSS, accepted this offer on October 8, 1985, and entered into an agreement with the Ad-Hoc Resource Committee representing the NMA and Nebraska Chapter of AAP. The agreement requests consultation services from the Resource Committee in regard to reports of suspected medical neglect of an infant born with a handicapping condition. The DSS will refer all reports to the Ad-Hoc Resource Committee, which will supply consultative services 24 hours a day, at no charge to the department. Individual physicians representing the committee will not consult on cases with which they have personal or professional involvement. DSS will also notify a previously designated hospital liaison person that the report has been received.

Following consultation, general counsel for DSS will render a legal opinion. DSS medical staff will then contact the hospital liaison person regarding DSS's decision and any actions the department may be pursuing.

It should be apparent that the new regulations can imply punitive damages to a physician, much as to any other citizen, who is in violation of the State Child Abuse and Neglect statutes. Notification of a hospital liaison person by CPS upon receipt of a report of suspected medical neglect will allow the hospital and physician to reassess care in the case in question, and to seek consultation from their hospital ICRC or the Ad-Hoc Resource Committee of NMA and the Nebraska Chapter of AAP. These discussions should allow the physician ample opportunity to avoid violation of the state statutes.

Although most of us feel that these "Baby Doe" regulations are a further encroachment of government into the practice of medicine, the current implementation of the regulations within Nebraska should assure adequate medical review and avoid nuisance snooping by bureaucrats within our hospitals and medical practices. We applaud the Nebraska Department of Social Services for willingly working with NMA and Nebraska pediatricians in establishing reasonable procedures for implementation of these regulations. We encourage all physicians within the state of Nebraska to cooperate with CPS in implementing these regulations and to continue to practice responsible and compassionate medicine when caring for disabled and handicapped infants.

FRACTURE OF THE MONTH

Percutaneous Marrow Injection for an Ununited Tibia

JOHN F. CONNOLLY, M.D.
RICHARD SHINDELL, M.D.
From the Combined Orthopaedic Programs, University of Nebraska, Creighton University, and Omaha Veterans Administration Medical Center, 42nd & Dewey Avenue, Omaha, NE 68105

OUR search for newer osseous repair methods, such as electrical stimulation,[1,2] derives its impetus from perceived limitation with standard autologous bone grafting techniques.[1,3,4,5,6,7,8,9] Autologous bone graft requires two operative procedures, one at the recipient and one at the donor site, with potential complications ranging from infection and painful scar[10] to fracture[11,12] and symptomatic disruption at the sacro-iliac joint.[13] Yet skeletal healing remains primarily a biologic process, dependent on cellular response.[7,14] The most productive source of such cells influencing osteogenesis is autologous marrow.[4,7,15,16,17] Workers in disciplines other than orthopaedics have demonstrated the feasibility of human marrow grafting for conditions ranging from acute and chronic leukemia to aplastic anemia and immunologic deficiency diseases.[18] A myriad of technical problems associated with bone marrow transplantations have been worked out in numerous centers beginning with investigations of E. D. Thomas and others in the 1960's.[19] Compared with the problems of bone marrow transplants for neoplasms, autologous marrow injection for fracture healing problems represents straight forward technology. The following case is to illustrate a method of bone marrow injection which we have found effective in managing problems of skeletal healing.

Case Report

A 31 year old man sustained an open tibial and fibular fracture as well as multiple other injuries when he was struck by a van. The tibial fracture was treated elsewhere by debridement, antibiotics and external fixation for a period of twelve weeks. Subsequently, the fracture was immobilized in a weight bearing cast, but remained infected and ununited. The patient was transferred to our facility eight months after injury when all of his fractures had healed except for the tibial non-union. His tibial fracture had 15° of motion with gentle stressing and several draining sinuses anteriorly. Cultures of the sinus tracts grew Staphylococcus aureus, Pseudomonas and Enterobacter. Roentgenogram of the left leg demonstrated an unstable mid-third fracture of his tibia and fibula without evidence of healing. (Fig. 1) Because of the infected non-union, a posterolateral graft was felt to be indicated but the patient was reluctant to undergo the standard operation. Consequently, we used a Thomas bone marrow aspiration needle to remove marrow from his left iliac crest. We inserted a similar needle posterior to the tibia into the non-union site using fluoroscopic control (Fig. 1). A total of 85 cc of bone marrow was removed from the iliac crest and then injected into the non-union. Subsequently, the needle was removed and a new weight bearing cast was applied.

We followed the patient subsequently in our clinic and continued to treat the fracture with a weight-bearing cast. Examination at six months showed no evidence of fracture instability and callus was seen in the region of the bone marrow injection. By eight months the fracture had consolidated clinically and radiographically. (Figure 2) The patient was permitted full weight bearing out of the cast and the fracture remained stable. Drainage from the fracture site diminished except for an infected ring sequestrum from the external fixation pin which eventually required sequestrectomy.

Discussion

The six-to-eight month period for healing after this bone marrow injection compares favorably with the intervals reported following standard open posterolateral cortical-cancellous grafting[20] or electrical stimulation.[1] Also, as has been reported with successful grafting

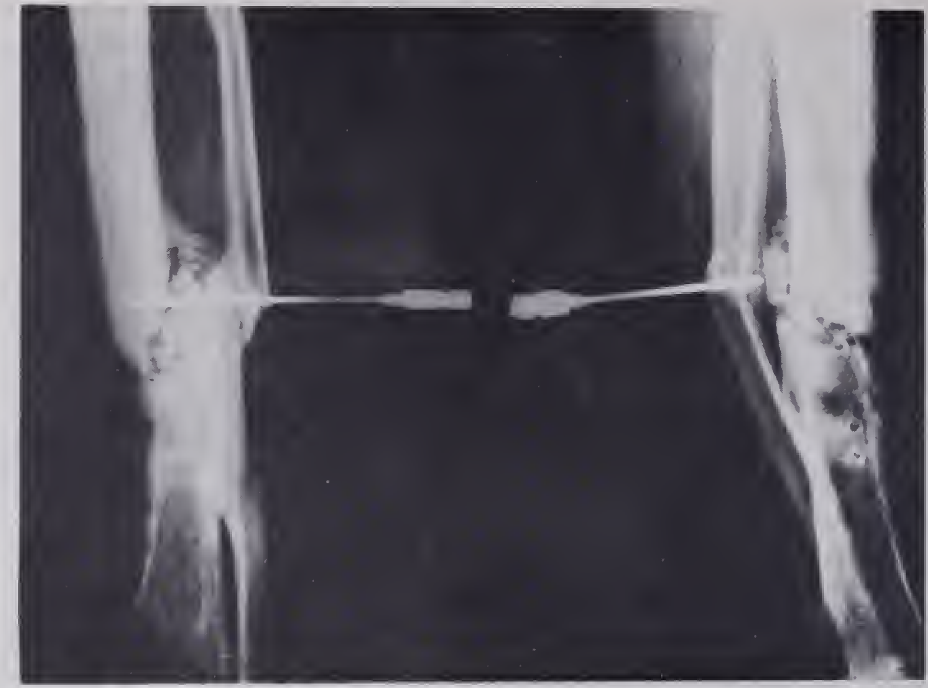

Figure 1-a and 1-b: Anteroposterior and lateral roentgenograms demonstrate tibial nonunion at the time of posterolateral injection.

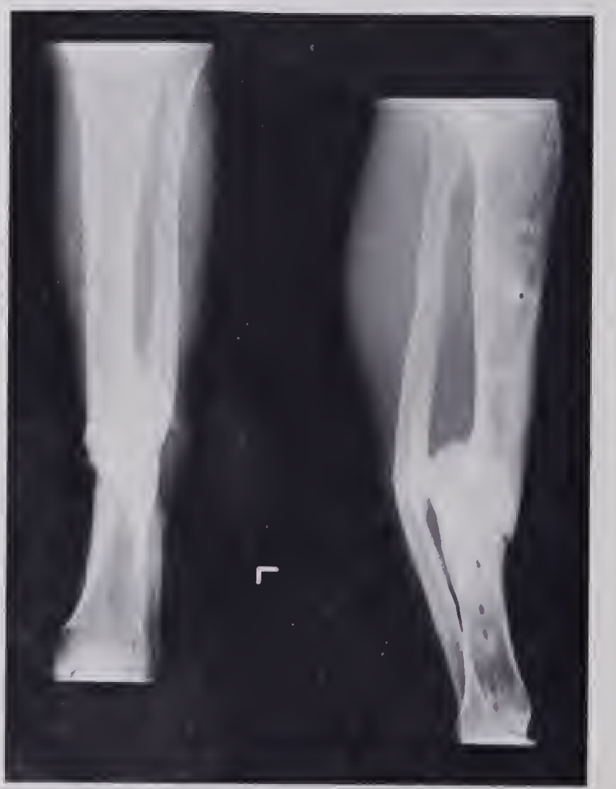

Figure 2-a and 2-b: Anteroposterior and lateral roentgenograms demonstrated pronounced callus formation in the region of the marrow injection at approximately nine months. The patient's fracture was stable and he could walk without cast support.

or electrical stimulation, the drainage from the infected non-union diminishes once fracture union is achieved. This method represents considerable modification as well as potential improvement over standard methods of bone grafting or electrical stimulation. While investigators have reported the use of marrow to supplement xenografts[9] or bone morphogenic protein,[5, 6, 8] this case represents the first report to our knowledge of the successful use of marrow injection alone to treat non-union. To insure that marrow is aspirated rather than peripheral blood, it is recommended that multiple separate punctures remove no more than five to seven millimeters at a time. The ability of marrow to form bone is related directly to cellular density.[2] Therefore, we are investigating methods in our laboratory to concentrate marrow and thereby increase cell density and the osteogenic effect of the injected material.

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President's Page

IS OUR QUALITY OF CARE IN JEOPARDY?

The massive changes in medicine today brought on by efforts purported to reduce costs are causing great concern as they are having an effect on the access to and the quality of medical care. The payment for health care is controlled to a great extent by third party payers such as business, government, and insurance companies including the health care delivery systems. The many regulations they have in force now controlling reimbursement are raising ominous signs.

These groups are guided by this philosophy: that if the dollar output for health care is to be reduced, one must lower the access to the care proposed by physicians in order for the savings to be achieved. The accepted standards of proper care are in jeopardy with this format. This tends to remove the doctor as the sick person's advocate and in his place substitute their current maze of rules and regulations regarding care of the sick. Most organizations deny they attempt to direct medical care, only indicate what actions will be reimbursable. This is, however, tantamount to directing care, as without coverage proper care would be impossible or dangerously curtailed for most people.

One factor involved in this scenario is preadmission certification. This requires the physician to phone the payer, explain his diagnosis and proposed course of work-up and treatment, and await permission to proceed. He talks to a nonmedical person who consults their rule book and issues a permit or denial. If permitted, the length of stay in the hospital that will be assigned the patient is indicated. After dismissal the payer can re-evaluate past events and decide to refuse coverage for the total hospitalization, or single out various tests and procedures not in compliance with their regulations. This may apply to all cases whether medical, surgical, pediatric, or obstetrical. No where are humanism or accepted standards of proper care more flagrantly flouted than in these actions. In addition, physicians are faced with rigid rules regarding the use of outpatient facilities, second and third opinions, and occasionally, admission to nursing homes.

Francis D. Donahue, M.D.

Recently, entrepreneurs have set up large utilization centers and now sell their utilization services to payers. Hence, the 800 number a physician might use to have his judgments evaluated may be thousands of miles away.

Aphorisms now in use are "severity of illness" and "intensity of treatment." If a patient is suddenly seized with a chest pain, the doctor may not be certain if this represents a heart attack or a simple problem such as a chest wall pain without hospitalizing and performing the proper exams and studies. For the patient's safety he is admitted only to find out after his study the problem is of minor significance and the treatment simple. Reimbursement for this hospitalization could be denied as his severity of illness and intensity of treatment didn't warrant hospitalization in retrospect. However, should the doctor be aware of the possibility of this happening and elect not to secure the proper study, the patient could be at serious risk, as his diagnosis and treatment could be needlessly delayed if he was indeed having a true heart attack. The same format applies to internal hemorrhaging. If this has not progressed to the level the payer feels represents their accepted level of severity of illness, hospital reimbursement could be denied. To postpone hospitalization for this reason could prove disastrous.

These events illustrate the conflicts existing between standards of proper care and misguided efforts to control costs.

If a precision machine is used to punch a set number of holes in a piece of metal every minute, the exact cost per hole can easily be calculated and one can be assured each hole will be precisely the same. However, using such logic in prescribing care for sick human beings for cost control purposes ignores humanism and any semblance of common sense.

All payers are not involved in these services — some not at all, while others are totally. The quality of medicine patients receive can suffer much in time to come. Today the Senate Committee on Aging is very much concerned with the documentation they have produced on the care of elderly, not only in hospitals but nursing homes as well, as result of these changes.

The public is not informed of the far-reaching effects this can have on the care they expect and deserve. One would have to be very naive to think cost reduction is the only motive behind these changes. If premiums are not reduced and access to care limited, payers stand to reap generous profits at the expense of the sick.

Francis D. Donahue, M.D.
President

Coming Meetings

1986 ANNUAL SESSION — April 24-28 — Omaha Marriott

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

FAMILY PRACTICE REVIEW, 1986 — April 14-25, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Approved for 87 hours of AMA Category I and AAFP Prescribed. One week and split sessions (one week of April session and one week of May session) accepted. "Mini" board exams given daily.

PEDIATRIC PHARMACOLOGY — April 26, 1986, Omaha Marriott, 9:00-4:00 p.m. Sponsored by Nebraska Chapter of American Academy of Pediatrics in conjunction with Nebraska Medical Association. Program Chairman, Tom Tonniges, M.D., Hastings, Nebraska.

NEBRASKA PATHOLOGY CONFERENCE — May 3, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Sponsored by Nebraska Association of Pathologists (4 credit hours)

FAMILY PRACTICE REVIEW, 1986 — May 5-16, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Approved for 87 hours of AMA Category I and AAFP Prescribed. One week and split sessions (one week of April session and one week of May session) accepted. "Mini" board exams given daily.

CURRENT TREATMENT OF VENTRICULAR ARRHYTHMIAS TO PREVENT SUDDEN DEATH — June 6, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Guest speakers John Fisher, Montefiore Medical Center, New York, E. Neil Moore, D.V.M., University of Pennsylvania, Philadelphia and Joel Morganroth, M.D., Hahnemann University, Philadelphia. (6 credit hours)

CURRENT CONCEPTS IN NEUROLOGY — June 13-14, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. A practical neurology program designed for the primary care physician. (12 credit hours)

(Continued on page 114)

The Auxiliary

PRESIDENTS MESSAGE

This will be my last message to you as your NMAA President. It has been a joy to work with all of you, and you will be in very good hands with Bev Kruger at the helm.

I shall continue to promote my program of Early Detection of Colorectal Cancer, and know that I can count on your continued support. We have a real job to do if we are going to make our goal of reaching all of the Lions Clubs in Nebraska with our program.

I would like to sincerely thank my board and all of you for your fine support. Dottie Matson said to me when I started my term that "You will find that doctors' wives are special people". She was SO RIGHT. All of you are special ladies.

Elsewhere in this issue there is a complete Convention Program. I would like to personally extend an invitation to all auxilians and physicians wives to attend the convention activities on April 25-28 at the Marriott in Omaha.

Ardis Grace

Ardis Grace

LEGISLATIVE DAY REPORT

The Nebraska Medical Association Auxiliary hosted a Legislative Day on Wednesday, January 29, 1986, at the Nebraska Club in Lincoln. Forty-four auxilians and guests attended a luncheon. Interest is definitely up for legislative affairs playing into the theme of the day which was "The Salvation of the State is Watchfulness in the Citizen," the words emblazoned in granite on the north face of our beautiful capitol.

Our two main speakers were Senator Patricia S. Morehead from Beatrice, representing District No. 30, and Senator Arlene Nelson from Grand Island, representing District No. 35.

Craig Urbauer, M.D., Lincoln, chairman of the NMA Commission on Legislation and Legal Affairs, gave an informative talk on health related issues which are being affected by both state and federal legislation. We thank Doctor Urbauer for his commitment and for sharing with us.

Lincoln auxilian Peg Fletcher educated us on the importance of contributing to the American Medical Political Action Committee (AMPAC) and to the Nebraska Medical Political Action Committee (NMPAC).

In attendance for answering questions were Kenneth E. Neff, NMA Executive Director, William L. Schellpeper, NMA Assistant Executive Director and David R. Buntain, NMA Lobbyist.

Susie Forker
Legislation

NATIONAL CLUSTER MEETING
1986

The National Cluster Meeting of the American Medical Association Auxiliary was held at The Drake Hotel, Chicago, Illinois, February 18-20, 1986. All state presidents-elect and nominated presidents-elect were invited to attend this annual meeting. Representing Nebraska were Bev Kruger (Mrs. Robert) and Colleen Adam (Mrs. George).

Dr. James Todd, Senior Deputy Executive Vice President of the AMA, greeted auxilians during the initial morning session and outlined the state of professional liability which currently exists among all physicians. He highlighted the staggering amount of money being spent on "defensive" medicine at this time.

Mary Kay McPhee, AMAA President, presented the Auxiliary Action Plan with the most notable recommended change occuring with the addition of a mid-winter Leadership Confluence. The rationale for this addition is to broaden the scope and effectiveness of the Leadership Confluence concept by reaching more county leaders.

During the National Briefing Session, members heard presentations by regional vice presidents and national representatives regarding the project bank, membership and communication. In addition, policies regarding requests for AMAA representatives to visit state and county meetings were outlined.

One highlight of the cluster meeting was a tour of the American Medical Association Building. While there, Dr. Sammons, Executive Director of the AMA, provided a brief over-view of the management principals of the large, multi-national corporate body which he represents. He emphasized that the AMA does business in eleven countries and prints JAMA in seven languages.

Jane Coughlin, director of Consulting Services for the AMA, spoke to the auxilians on "Working With the Media" and highlighted methods of communicating effectively. With credibility as our goal, specific tactics for use with both radio and television were emphasized.

Final sessions of the cluster meeting dealt with AMPAC activities and National Committee Programs. Before the close of the meeting, Mary Kay McPhee and Hazel Lewis, executive director of the AMAA, provided an outline of the 1986 Annual Convention and addressed the requirements for submitting resolutions and nominations for various offices.

Once again, representatives to this in-depth meeting left with not only an enthusiasm for and a sense of loyalty to the organization, but with a vast amount of knowledge to share with other state leaders.

Respectively submitted by,
Colleen Adam,
First Vice President, NMAA

University of Nebraska Medical Center News:

When Dr. Sidney Mirvish conducted research showing the cancer causing effects of a group of compounds known as nitrosamines, little did he realize at the time that he would use his work in evaluating the correlation between oral cancer and the use of smokeless tobacco.

That link became evident recently at a national "concensus" conference presented by the National Institutes of Health on the health implications of using smokeless tobacco, such as snuff and chewing tobacco.

Dr. Mirvish, a professor at the University of Nebraska Medical Center's Eppley Cancer Institute, was one of 13 panelists at the conference evaluated evidence of the health hazards of smokeless tobacco.

Dr. Mirvish said that one of the alarming aspects of snuff is its high content of certain nitrosamine compounds, predominantly NNN and NNK. Dr. Mirvish and other Eppley Institute scientists have done extensive research on these and other nitrosamine compounds during the past decade and found that they caused various kinds of tumors and certain forms of cancer in laboratory animals.

"This high nitrosamine level in smokeless tobacco," said Dr. Mirvish, "is a very likely mechanism by which this product induces tumors of the mouth in people who use it."

Much of Dr. Mirvish's previous work on nitrosamines related to the level of such compounds in foods. Since smokeless tobacco products and food are both taken by mouth, "it's quite legitimate" to compare the dangers of nitrosamine levels in each, he said.

He explained that the Food and Drug Administration will not permit the marketing or sale of foods which contain a ratio of more than .01 parts of nitrosamines per million parts of food or 10 micrograms per kilogram of the food product.

"In snuff, the level of nitrosamines is about 10 parts per million, which is a thousand times higher than the limit for food," he said.

In chewing tobacco, he noted, the level of nitrosamines is one-half to one-third of that in snuff.

"The presence of a high level of this carcinogen makes smokeless tobacco a potentially dangerous product, and this suggests findings showing that smokeless tobacco use is indeed correlated with oral cancer," he said. "What is of great concern to us is that snuff use is on the increase. Not only do school age children use it, but even children in kindergarten, according to some reports.

Dr. Edward Bresnick, director of the Eppley Institute, said he and his colleagues plan to do further research on nitrosamines in smokeless tobacco and collect more information on its dangers.

In the meantime, Dr. Mirvish supports pending legislation in Congress advocating that warning labels be placed on smokeless tobacco products, similar to the warnings on cigarette packages, and prohibiting the sale of such products to minors.

Creighton University News:

CREIGHTON TO HOLD SYMPOSIUM ON AIDS

An update on Acquired Immune Deficiency Syndrome will be presented during Creighton University's seventh annual Infectious Disease Symposium on April 16.

The half-day conference for health-care professionals will include several nationally known experts on AIDS.

Sponsored by Creighton's departments of microbiology and medicine, the continuing medical education symposium will be held from 1 p.m. to 5:30 p.m. in the Rigge Science Auditorium on the university campus.

Dr. Donald Armstrong, chief of infectious disease service and director of the microbiology laboratory at Memorial Sloan-Kettering Cancer Center in New York, will speak on "AIDS: Infectious Complications, Treatment and Prevention."

Dr. Henry Masur, deputy chief of the critical care medicine department at the National Institutes of Health in Washington, D.C., will talk on the "Epidemiology of AIDS."

Other speakers will include Dr. Richard O'Brien, health sciences vice president and medical school dean at Creighton; Dr. Paul Swayne, Creighton assistant professor of periodontics; and Dr. Ruth Purtilo, chairman of the department of medical jurisprudence and humanities at the University of Nebraska Medical Center.

Following the individual presentations, there will be a panel discussion and question-and-answer session. Dr. Laurel Preheim, director of Creighton's infectious disease section, is chairman of the symposium.

There is a $20 registration fee for physicians wanting to receive continuing education credit for attending the symposium. Others may attend at no charge.

To receive handout materials, persons must register for the program by April 11.

* * *

C.U. PARAMEDIC PROGRAM NATIONALLY RECOGNIZED

Twice a week, auto mechanic Will Rose spends four hours on the road driving between his home in Fairmont and Omaha to attend a nationally recognized, paramedic training program offered by the Creighton University School of Medicine.

The 10-year-old program is one of approximately 20 such programs in the country certified by the American Medical Association.

Rose, 33, says a poor agricultural economy and his 10 years' experience as an emergency medical technician on the Fairmont volunteer fire department led him to Creighton's paramedic program.

'I've seen a lot of car accidents and farm accidents," Rose relates. "When you go out and help someone, you come off it with a real high. A lot of people don't understand why anyone would want to deal with injured and dead people. They don't understand it's the people you help that give you the high."

Although what they are allowed to do varies from state to state, paramedics now are considered essential personnel by many fire departments and ambulance services, notes Twink Gorgen, Creighton paramedic instructor.

"The statistics show paramedics have a great impact on survival rates. The ability of paramedics to defibrillate (apply a brief electroshock to the heart) has greatly increased survival rates," she says.

National statistics show that only 1 percent to 5 percent of those patients transported to hospitals by ambulance ultimately survive, if no emergency medical services are provided en route, Gorgen says. The survival rate increases to 22 percent to 36 percent when advanced levels of cardiac care are immediately available, she adds.

To date, a total of 259 men and women have graduated from Creighton's paramedic training program. But not everyone makes it through the program, which has a dropout rate approaching 20 percent.

"The students are told right up front that it's difficult, and some don't cut it. But the national registry exam they must pass is very difficult, and we aren't doing them any favor by just letting them get by," notes Jeanne O'Brien, training coordinator.

Creighton paramedic students range from youngsters just out of high school to experienced firemen, she says. Most come from Nebraska or surrounding states.

The course is offered once or twice a year with each class taking anywhere from six to 10 months to complete, the amount of time dependent on whether it's a day or evening class.

In addition to 340 classroom hours, participants also must complete 160 clinical hours in a hospital setting and 400 hours in the field.

That compares to an emergency medical technician, who undergoes a total of only 110 hours of training.

Grade requirements for Creighton's paramedic students also are demanding.

Students are allowed to fail (any grade less than 80 percent) only 15 of approximately 60 to 75 quizzes given during the course of the class. In addition, they must achieve a grade of 75 percent or better on three block examinations and a final test, or they immediately are dismissed from the program.

Gorgen says the demands placed on the students are necessary.

"The class may be difficult and demanding, but it's that way in real life too" for paramedics, she notes. "Paramedics are an important part of the health-care-delivery system, especially when they are well trained."

Coming Meetings

(Continued from page 109)

TETONS PEDIATRIC CONFERENCE — June 29-July 3, 1986, Jackson Role Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Pediatrics. Subjects to include Ophthalmology, General office pediatrics and gastroenterology. Guest speaker: Joan Hodgman, M.D., USC School of Medicine, Neonatologist. (17¼ credit hours)

TETONS SPORTS MEDICINE CONFERENCE—July 7-10, 1986, Jackson Hole Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Orthopaedic Surgery and Rehabilitation. Division of Sports Medicine. Guest speakers: Oded Bar-Or, M.D., Director of Children's Exercise and Nutrition Center, McMaster University, Hamilton, Ontario, Canada; John A. Feagin, M.D., President, American Orthopaedic Society for Sports Medicine (20 credit hours).

EMERGENCY MEDICINE REVIEW— September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

EMERGENCY MEDICINE REVIEW— Octtober 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

UNMC COLLEGE OF MEDICINE ALUMNI ASSOCIATION

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE - ALPHA OMEGA ALPHA, AOA DAYS — April 8 & 9, 1986, UN Medical Center, Omaha, Nebr. Speaker: William J. Wilson, M.D., Dept. of Radiology, Memorial Hospital Medical Center, Long Beach, Calif., and Adjunct Professor of Radiology, University of California at Irvine. April 8, 12:00 noon, CCE Amphitheatre, UNMC - Everyone welcome. AOA Banquet: April 9, 1986, 6:00 p.m., Highland Country Club, Omaha.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSN. — Alumni Reception, Saturday, April 12, 1986, 5:30-7:00 p.m., Omaha Marriott Hotel. In conjunction with Nebraska Academy of Family Physicians Meeting. Cash Bar. All alumni and guests cordially invited.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSN. — Annual Business Meeting, Saturday, April 26, 1986, in conjunction with Nebraska Medical Association Meeting; 4:30 p.m., Lincoln Suite, Omaha Marriott Hotel, Omaha. Alumni are urged to attend; spouses and guests are welcome.

LINCOLN GENERAL HOSPITAL

FIFTH ANNUAL CORNHUSKER/CANADIAN CLINICAL CONFERENCE — June 22-27, 1986. Lynn Lake, Manitoba, Canada. Fee: $150.00. For information, contact: Cathy Kinnaman, RN, Education and Staff Development, Lincoln General Hospital, 2300 South 16th Street, Lincoln, NE 68502, (402) 473-5638.

CREIGHTON UNIVERSITY

Apr. 5-12, Current Topics in Gastroenterology for the Primary Care Physician, 24 hours, Beaver Run Resort, Breckenridge, Colorado. Fee: $125.00.

Apr. 14-16, Coronary Heart Disease and Arrhythmias, 11 hours, Sheraton Maui Hotel, Island of Maui.

Apr. 16, Symposium on Acquired Immune Deficiency Syndrome, 4 hours, Rigge Science Hall, Creighton University. Fee: $20.00.

Apr. 18-19, Arrhythmias: Interpretation, Diagnosis & Management, 11 hours, Marriott Hotel, Washington, D.C.

May 17-31, Update on Infectious Diseases & Endocrinology, 36 hours, Scandinavia Study/Tour. Fee: $400.00.

May 23-25, Family Medicine Update, Okoboji, Iowa.

May 26-29, Symposium on Foregut Disease, 24 hours, London, England. Fee: $50.00 with Travel Group.

June 7, Maurice Grier Symposium (OB/GYN), Marriott Hotel, Omaha, Nebraska.

June 16-30, GI Medical/Surgical Update, 36 hours, Germany Study/Tour. Fee: $400.00.

Aug. 29-30, Family Medicine Update, Okoboji, Iowa.

Sept. 18-30, Cardiology/Rheumatology Update, 36 hours, Ireland Study/Tour. Fee: $400.00.

For further information, contact the Division of CME, Creighton University School of Medicine, Omaha, Nebraska 68178 402/280-2550.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

COMMON GASTROENTEROLOGY PROBLEMS — April 1, 1986 at Alameda Plaza Hotel, Wornall Road at Ward Parkway, Kansas City, Missouri.

AMERICAN MEDICAL SOCIETY ON ALCOHOLISM AND OTHER DRUG DEPENDENCIES — April 18-22, 1986 at the Westin St. Francis Hotel in San Francisco, California. Information may be obtained by writing AMSA DD, 12 West 21st Street, 7th Floor, New York, New York 10010.

MICROCOMPUTER JUNGLE: IMPACT ON HEALTH CARE — April 17-18, 1986, sponsored by the University of Kansas Medical Center. Location of the course will be Doubletree Hotel, Overland Park, Kansas. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

THIRTY-SIXTH ANNUAL POSTGRADUATE SYMPOSIUM ON ANESTHESIOLOGY — April 25-27, 1986. Sponsored by the University of Kansas Medical Center. The course will be held at the Crown Center Hotel in Kansas City, Missouri. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103 (913) 588-4480.

INFECTION CONTROL: HOW DO WE LIVE WITH AIDS? — May 13-14, 1986. Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Fee: $90.00. Sponsored by the University of Kansas Medical Center, Office of Continuing Education. Credit: 9 hrs. AMA Cat 1, AAFP.

ANNUAL SPRING SCIENTIFIC SEMINAR ON PATHOLOGY — May 17, 1986. Sponsored by the University of Kansas Medical Center, Office on Continuing Education. Location: Rieke Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA Cat 1.

FIFTH ANNUAL SUMMER MEDICAL SYMPOSIUM: "MEDICINE FOR THE PRACTICING PHYSICIAN"—July 10-13, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education and the University of Kansas School of Medicine, Wichita, KS 67214. Location: Broadmoor Hotel, Colorado Springs, CO. Credit: 15 hrs., AMA Cat 1. Fee: $375.00.

SCHEDULED MEETINGS

THE NEBRASKA CHAPTER OF THE AMERICAN ACADEMY OF FAMILY PHYSICIANS will hold their 38th Annual Scientific Assembly, April 11 and 12, 1986 at the Marriott Hotel, Omaha, Nebraska. Contact: Phyllis Hansen, Executive Director, Nebraska Academy of Family Physicians, 401 No. 117th, Suite 202, Omaha, Nebraska 68154 (402) 333-5856.

"MEDICAL TECHNOLOGY ASSESSMENT FOR HEALTH PROFESSIONALS" — June 16-20, 1986. Offered by faculty of the Sloan School of Management and visiting faculty as part of the 1986 MIT Summer Session. Continuing medical education credit for the program offered by the Office of Continuing Medical Education at Tufts University School of Medicine. A detailed description of the program is available upon request from the Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge, MA 02139.

PROGRAM

118th Annual Session

THE NEBRASKA MEDICAL ASSOCIATION

IN CONJUNCTION WITH:

- Nebraska Allergy Society
- Nebraska Society of Anesthesiologists
- Missouri Valley Dermatologic Society
- Nebraska Chapter, American College of Emergency Physicians
- American Heart Association, Nebraska Affiliate, Douglas/Sarpy Division
- Nebraska Section, American College of Obstetricians & Gynecologists
- Nebraska Academy of Ophthalmology
- Nebraska Academy of Otolaryngology
- Nebraska Chapter, American Academy of Pediatrics
- Nebraska Perinatal Organization
- Nebraska Society of Plastic & Reconstructive Surgeons
- Nebraska Psychiatric Society
- Nebraska Chapter, American College of Surgeons
- Nebraska Thoracic Society

April 24-28, 1986

Omaha Marriott Hotel
Omaha, Nebraska

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  - Anesthesiology 24
  - Cardiology 14
  - Dermatology 18
  - Emergency Medicine 28
  - Obstetrics & Gynecology 18
  - Ophthalmology 16
  - Otolaryngology 19
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  - Perinatal Workshop 11-13
  - Plastic Surgery 19
  - Psychiatry 25
  - Surgery 22-23
  - Thoracic Medicine 15
- Sportsman's Day Activities 8

SCIENTIFIC SESSIONS COMMITTEE

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John R. Luckasen, M.D.	Omaha
Donna K. Nelson, M.D.	Omaha
Jane F. Potter, M.D.	Omaha
Richard Tempero, M.D.	Omaha
Donald E. Waltemath, M.D.	Lincoln

NOTE: Annual Session registrants are welcome at all scientific programs. Only business meetings are limited to specialty group members.

118TH ANNUAL SESSION NEBRASKA MEDICAL ASSOCIATION

PURPOSE:

To advance the science and art of medicine and to elevate the standards of medical education. Meetings of the Annual Session are devoted to the scientific work of the members, disseminating to members and others, facts and opinions relating to medical knowledge, treatment and procedures.

The Scientific Sessions Committee of the Nebraska Medical Association, as its continuing medical education mission, seeks to satisfy the educational needs and interest of participants in the Nebraska Medical Association with scientifically sponsored programs. Needs and interest are adjusted according to geographic and physician specialty requests on an annual review basis.

The overall goal of this scientific program is to substantiate or change the attitude and approach of the physician to the solution of a given medical problem, present new knowledge in a specific area update data and introduce new specific skills and techniques.

SPONSORSHIP:

The meeting is sponsored by the Scientific Sessions Committee of the Nebraska Medical Association in conjunction with the Nebraska Allergy Society, the Nebraska Society of Anesthesiologists, the Missouri Valley Dermatologic Society, the Nebraska Chapter, American College of Emergency Physicians, the American Heart Association, Nebraska Affiliate, Douglas/Sarpy Division, the Nebraska Section, American College of Obstetricians and Gynecologists, the Nebraska Academy of Ophthalmology, the Nebraska Academy of Otolaryngology, the Nebraska Chapter, American Academy of Pediatrics, the Nebraska Perinatal Organization, the Nebraska Society of Plastic & Reconstructive Surgeons, the Nebraska Psychiatric Society, the Nebraska Chapter, American College of Surgeons, and the Nebraska Thoracic Society.

CREDIT:

This program has been reviewed and is acceptable for 28 Prescribed hours by the American Academy of Family Physicians.

As an organization accredited for continuing medical education, the Scientific Sessions Committee of the NMA certifies that this continuing medical education offering meets the criteria for 28 hours of credit in Category I, provided the program is used and completed as designed.

GENERAL INFORMATION

The host facility for the Annual Session is the Omaha Marriott Hotel, 10220 Regency Circle, Omaha, NE 68114, (402) 399-9000.

REGISTRATION: The registration desk will be located in the lobby of the Omaha Marriott Hotel. Registration begins at 7:00 a.m., Thursday, April 24. Identification badges must be worn by all persons attending the session.

FRANCIS D. DONAHUE, M.D.
President 1985-86

President

Francis D. Donahue, M.D., Omaha	1985-86
Hiram R. Walker, M.D., Kearney	1986-87

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District		Term Expires
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IV.	Roger P. Massie, M.D., Plainview	1987
V.	William J. Chleborad, M.D., Fremont	1988
VI.	Robert W. Herpolsheimer, M.D., Seward	1988
VII.	Robert E. Quick, M.D., Crete	1988
VIII.	Floyd Shiffermiller, M.D., Ainsworth	1988
IX.	Warren G. Bosley, M.D., Grand Island	1986
X.	David R. Little, M.D., Hastings	1986
XI.	R. E. Donaldson, M.D., North Platte	1986
XII.	R. G. Heasty, M.D., Scottsbluff	1986

Chairman, Board of Councilors

Stanley M. Truhlsen, M.D., Omaha	1987

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Stanley M. Truhlsen, M.D., Omaha	Ex-Officio

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John D. Coe, M.D., Omaha	1986
C. J. Cornelius, Jr., M.D., Sidney	1987

Alternate Delegates to AMA

Blaine Y. Roffman, M.D., Omaha	1986
Louis J. Gogela, M.D., Lincoln	1987

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Editor, Nebraska Medical Journal

Alan D. Forker, M.D.	Lincoln

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HIRAM R. WALKER, M.D.
President 1986-87

ACKNOWLEDGEMENTS

The Nebraska Medical Association gratefully acknowledges the support of the following organizations for their contribution to the 1986 Annual Session.

* * *

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SEARLE PHARMACEUTICALS, INC.

NEBRASKA MEDICAL ASSOCIATION BUSINESS SESSIONS

Board of Directors
Friday, April 25, 7:00 a.m., Lincoln Suite

Board of Councilors
Friday, April 25, 10:00 a.m., Columbus Suite

House of Delegates
First Session:
Friday, April 25, 1:30 p.m., Salon C, D, & E

RECOGNITION OF FIFTY-YEAR PRACTITIONERS

George T. Alliband, M.D., Omaha
Charles M. Coe, M.D., Wakefield
Hull A. Cook, M.D., Sidney
McCleery Glazier, M.D., Laguna Hills, CA
Robert E. Karrer, M.D., York
Herbert D. Kuper, M.D., Columbus
John O. Milligan, M.D., Fremont
Howard E. Mitchell, M.D., Lincoln
Maurice Lewis Pepper, M.D., Omaha
Kenneth E. Pletcher, M.D., Bellevue

Reference Committees, 2:30 p.m.

Second Session:
Sunday, April 27, 9:30 a.m., Salon B, C, D, & E
Presentation of AMA Education and Research Foundation Checks
Presentation of Nebraska Medical Foundation Student Research Scholarship Checks

Third Session:
Sunday, April 27, 4:00 p.m., Salon B, C, D, & E

Nominating Committee
First Session:
Friday, April 25, 4:00 p.m., Columbus Suite

Second Session:
Saturday, April 26, 9:00 a.m., Salon B

Honors Luncheon
Past Presidents' and 50-Year Practitioner Luncheon
Friday, April 25, 12:00 noon, Nebraska Suite B

PROGRAM

MONDAY, APRIL 28

Sportsman's Day

7:00 a.m. NMA MINI MARATHON
Around and through Regency
(Participation by preregistration only)
Eugene M. Zweiback, M.D., Chairman

12:00 noon to 6:00 p.m. TENNIS TOURNAMENT
(Location to be announced)
(Participation by preregistration only)
Robert M. Cochran, II, M.D. Co-Chairman
Harold K. Tu, M.D., Co-Chairman

1:00 p.m. GOLF TOURNAMENT
Highland Country Club
12627 Pacific Street
(Shotgun Tee Off)
(Participation by preregistration only)
Luncheon Buffet 11:00 a.m. to 12:30 p.m.
Eugene M. Zweiback, M.D., Chairman

5:30 p.m. SPORTSMAN'S DAY SOCIAL HOUR
Highland Country Club
12627 Pacific Street
Eugene M. Zweiback, M.D., Chairman

7:00 p.m. SPORTSMAN'S DAY ANNUAL AWARDS DINNER
Highland Country Club
12627 Pacific Street
Eugene M. Zweiback, M.D., Chairman

SPECIALTY SOCIETY BUSINESS SESSIONS

Nebraska Academy of Ophthalmology
Saturday, April 26, 4:00 p.m., Beatrice Suite

Nebraska Chapter, American Academy of Pediatrics
Saturday, April 26, 4:00 p.m., Salon D

Nebraska Perinatal Organization
Thursday, April 24, 12:15 p.m., Salon E

Nebraska Society of Plastic & Reconstructive Surgeons
Saturday, April 26, 10:00 a.m., Room 253

Nebraska Section, American College of Obstetricians & Gynecologists
Saturday, April 26, 10:00 a.m., Salon A

Nebraska Chapter, American College of Surgeons
Saturday, April 26, 5:00 p.m., Salon C

NOTES

PROGRAM

Perinatal Potpourri

Sponsored by —
Nebraska Perinatal Organization and the Nurses Association of the American College of Obstetricians & Gynecologists

WEDNESDAY EVENING, APRIL 23

7:00 p.m. to 9:00 p.m.	**Educational Movies** — Lincoln Suite Popcorn, pretzels, pop

THURSDAY, APRIL 24

7:00 a.m. to 6:00 p.m.	Salon C
7:00	**Registration & Visit Exhibits**
8:00	**Welcome** Y. George Miyazaki, M.D., Omaha Sheila Ecklund, R.N., Lincoln
	Moderator - William F. Rayburn, M.D., Omaha
8:10	**Fetal Surgery** Kim Ford Kocur, R.N., Chicago, Illinois
9:00	**Issues Related To Preconception & Prenatal Nutrition** Bonnie Worthington Roberts, Ph.D., Seattle, Washington
9:50	**Break** — Compliments of Ross Laboratories Visit Exhibits
	Workshops (Choice of One)
10:15	Session A — Beatrice Suite
	Nutritional Issues Related to High-Risk Pregnancy Bonnie Worthington Roberts, Ph.D., Seattle, Washington
	Session B — Lincoln Suite
	Review of ACLS Protocol For Infant And Pediatric Resuscitation Ken Draper, R.R.T., Lincoln
	Workshops (Choice of One)
11:10	Session A — Beatrice Suite
	Infant Stimulation Kathy Walburn, M.A., Omaha
	Session B — Lincoln Suite
	Offering Care When You Can't Cure The Problem Kim Ford Kocur, R.N., Chicago, Illinois

PROGRAM

THURSDAY, APRIL 24

Session C — Columbus Suite

Transportation Of Respiratory Distress Infant & The Respiratory Therapist
Fred Hall, M.D., Kansas City, Missouri

Session D — Fremont Suite

Screening Protocols To Help Detect Pre-Diabetic Pregnancy
Marvin L. Dietrich, M.D., Omaha
Kathy Goddard, R.D., Lincoln
William F. Rayburn, M.D., Omaha
Ralph E. Woods, M.D., Omaha

12:15 **Lunch** — Salon E
Nebraska Perinatal Organization Business Meeting

1:30 **Visit Exhibits** — Nebraska A & B

1:55 General Session
Salon C

Fetal Habituation In Relation To Infant Behavior & Development: A First Look
Lynda Madison, Ph.D., Omaha

Workshops
(Choice of One)

2:45 Session A — Beatrice Suite

DRGs In Perinatal Medicine
Larry D. Eggert, M.D., Omaha

Session B — Lincoln Suite

Home Ventilator Management Of Infants
Mike Duytschaver, C.R.T.T., Iowa City, Iowa

Session C — Columbus Suite

Prenatal Education Strategies - A Public Health Approach To Fetal Alcohol Syndrome
Becky Beardsley, R.N., Lincoln
Paula Eurek, R.D., Lincoln

3:35 **Break** — Compliments of Ross Laboratories

3:50 General Session
Salon C

Effective Medical Lobbying
Kenneth E. Neff, Lincoln

4:40 **RT, Nutritionists Network**

General Evaluations

6:00 **Wine & Cheese Party** — Salon D & E
(Perinatal Workshop Registrants Only)
Compliments of NPO and NAACOG
Auction — Sponsored by the NPO and NAACOG

PROGRAM

FRIDAY, APRIL 25

7:00 a.m.
to
5:00 p.m.

6:15 **Fun Run** — Sponsored by Mead Johnson

7:00 **Registration**

Continental Breakfast For Registrants — Nebraska A & B

OB Breakfast Meeting — Columbus Suite

8:30 **Welcome** — Salon A & B
Robert M. Nelson, M.D., Omaha

Moderator — Robert M. Nelson, M.D., Omaha

8:40 **Adoption**
Kathleen Gillen, Omaha
Art & Patricia Rodgers, Omaha
Roberta Siebert, S.W., Omaha
Renae Stevens, Omaha

9:30 **Baby Doe**
Trudy Bredthauer, J.D., Omaha

10:20 **Break**

Moderator — Kenton L. Shaffer, M.D.
Kearney

10:40 **Panel On Infant Care Review Committees**
Andrew Jameton, Ph.D., Omaha
James R. Newland, M.D., Omaha

11:30 **Lunch** — Salon A & B

Moderator — Gilles R. G. Monif, M.D., Omaha

12:30 **Comprehensive Preconception & Prenatal Risk Assessment**
Harry Farb, M.D., Minneapolis, Minnesota

1:20 **Break**

1:40 **Family-Centered Maternity Care: A Fresh Look At What's Happening Across The Country**
Susan McKay, R.N., Ph.D., Laramie, Wyoming

Workshops
(Choice of One)

2:30 Session A — Salon A

Position Changes In Labor
Susan McKay, R.N., Ph.D., Laramie, Wyoming

Session B — Salon B

Home Hyperalimentation
Dean L. Antonson, M.D., Omaha
Nancy Murray, R.N., Omaha

Workshops
(Choice of One)

3:25 Session A — Salon A

Use of Level II Ultrasound In The Diagnosis Of Fetal Anomalies And Its Effect On Patient Management
Harry Farb, M.D., Minneapolis, Minnesota

Session B — Salon B

Caring For A Friend's Sick Child
Barbara Schiebe, R.N., Omaha
Kathy Wright, R.N., Omaha

4:25 **Evaluation**

The Sixth Annual Nebraska Perinatal Workshop Program has been designed to update health care professionals in regard to mother and newborn.

PROGRAM

FRIDAY MORNING, APRIL 25

7:30 a.m. to 12:00 noon **Cardiology**
Salon D & E
Sponsored by —
American Heart Association, Nebraska Affiliate, Douglas/Sarpy Division

Program Chairman —
Mark A. Williams, Ph.D., Omaha

Advances In Patient Care Through Prevention — Good Medicine And Good Business

Moderator — William F. Gust, M.D., Omaha

7:30 **Continental Breakfast**
Fruit, rolls, coffee, tea, and milk

8:00 **Cardiovascular Disease Risk Reduction — Key To Practice Growth And Development**
Calvin F. Fuhrmann, M.D., P.A., Baltimore, Maryland

9:15 **Coffee Break**

9:30 **Hyperlipidemia — What Should We Do?**
Bruce M. McManus, M.D., Ph.D., Omaha

10:45 **Options For Smoking Cessation Programs Through Your Office Practice**
Dennis E. Richling, M.D., Omaha

The objective of this course is to provide physicians with information focusing on the role and value of implementing cardiovascular disease prevention programs into the office practice with emphasis on strategies for enhancing patient care and business economics.

FRIDAY EVENING, APRIL 25

FRIDAY

5:30 p.m. to 8:00 p.m. **Socio-Economic**
Salon C & D

Sponsored by —
Nebraska Medical Association

Program Chairman & Moderator —
Francis D. Donahue, M.D., Omaha

5:30 **Reception** — Salon E

6:00 **Dinner** — Salon C & D

American Medicine After Reagan
Timothy T. Flaherty, M.D., Neenah, Wisconsin

Timothy T. Flaherty, M.D.

PROGRAM

SATURDAY MORNING, APRIL 26

7:00 a.m. to 8:30 a.m. **Child Sexual Abuse**
Salon A
Sponsored by —
State of Nebraska, Department of Social Services

Presiding — Francis D. Donahue, M.D., Omaha

7:00 **Breakfast**

7:30 **Child Sexual Abuse — A Medical Perspective**
Donna A. Rosenberg, M.D., Denver, Colorado

SATURDAY MORNING, APRIL 26

8:00 a.m. to 10:00 a.m. **Allergy**
Salon E
Sponsored by —
Nebraska Allergy Society

Program Chairman & Moderator —
Melvin Hoffman, M.D., Lincoln

8:00 **Diagnostic Testing In Allergy**
Harold S. Nelson, M.D., Col., USA, Denver, Colorado

9:00 **Beta Andrenergic Agents — Clinical Use And Sub-Sensitivity**
Harold S. Nelson, M.D., Col., USA, Denver, Colorado

This course is designed to review the diagnostic tests used in allergy, compare them, and make recommendations for their use.

10:00 a.m. to 2:00 p.m. **Thoracic Medicine**
Salon E
Sponsored by —
Nebraska Thoracic Society

Program Chairman & Moderator —
Thomas C. Tinstman, M.D., Omaha

Pulmonary Medicine — New Technology

10:00 **Hyperbaric Oxygen Therapy**
Lon W. Keim, M.D., Omaha

10:40 **Laser Bronchoscopy**
John C. McDougal, M.D., Rochester, Minnesota

11:20 **Breathing During Sleep**
John D. Roehrs, M.D., Omaha

12:00 **Luncheon** — Lincoln Suite

Endobronchial Radiation For Lung Cancer
John C. McDougal, M.D., Rochester, Minnesota

This course will present the indications and expected results from four new technologies being used in pulmonary medicine.

SATURDAY

PROGRAM

SATURDAY, APRIL 26

8:30 a.m. to 5:00 p.m.	**Ophthalmology** Nebraska A & B Sponsored by — **Nebraska Academy of Ophthalmology** Program Chairman — Peter J. Whitted, M.D., Omaha
8:30 a.m. to 11:30 a.m.	**Eye Care For Primary Care Physicians** Presented by Nebraska Academy of Ophthalmology Members
8:30	**Welcome & Announcements**
8:35	**Ocular Trauma — Diagnosis & Treatment**
9:20	**Break**
9:30	**Basic Ophthalmic Skills — Part I (Workshop)**
10:00	**Break**
10:10	**The Red Eye — Differential Diagnosis**
10:55	**Break**
11:00	**Basic Ophthalmic Skills — Part II (Workshop)**
11:30	**Break**
12:00	**Luncheon** — Nebraska A & B Held in conjunction with the National Society to Prevent Blindness, Nebraska Affiliate **"Down Under"** Thomas J. Roussel, M.D., Miami, Florida Moderator — Everett C. Madson, M.D., Omaha
2:00	**General Session** — Beatrice Suite **Endophthalmitis — Its Diagnosis And Therapy** Thomas J. Roussel, M.D., Miami, Florida
2:45	**Break**
3:00	**Herpetic Eye Disease** Thomas J. Roussel, M.D, Miami, Florida
3:45	**Break**
4:00	**Business Meeting** Presiding — Everett C. Madson, M.D., President, Omaha

These presentations will cover the topic of intra and extra ocular infections.

PROGRAM

SATURDAY, APRIL 26

9:00 a.m. to 5:00 p.m.	**Pediatrics** Salon D Sponsored by — **Nebraska Chapter, American Academy of Pediatrics** Program Chairman — Tom F. Tonniges, M.D., Hastings Moderator — Hobart E. Wallace, M.D., Lincoln
9:00	**Pediatric Pharmokinetics** Jeffrey N. Baldwin, R.Ph., Omaha
9:30	**Pediatric Use And Abuse Of Cephalosporins** Robert G. Penn, M.D., Omaha
10:00	**New Drugs In The Treatment of Rheumatology** James T. Cassidy, M.D., Omaha
10:30	**Break**
10:45	**Drug Treatment Of Asthma** Frederic Kiechel, III, M.D., Lincoln Moderator — Larry A. Latson, M.D., Omaha
11:15	**Student Research Papers** Creighton University School of Medicine University of Nebraska College of Medicine
12:00	**Luncheon For Nebraska Chapter Members** — Columbus Suite Moderator — Bruce A. Buehler, M.D., Omaha **Saturday Noon Live** Panel Discussion Valerie J. Bailie, M.D., Gering Philip J. Hofschire, M.D., Omaha Kenton L. Shaffer, M.D., Kearney Jon A. Vanderhoof, M.D., Omaha Moderator — Karen J., Higgins, M.D., Grand Island
1:45	**Synthetic Growth Hormone And Its Uses** Kevin P. Corley, M.D., Omaha
2:15	**What's New In The N.I.C.U.** Paul D. Goodrich, M.D., Omaha
2:45	**New Drugs In The Treatment Of Hypertension** Mark T. Houser, M.D., Omaha
3:15	**Drug Treatment of Neurogenic And Non-Neurogenic Bladders** Francis F. Bartone, M.D., Omaha
3:45	**Break**
4:00	**Nebraska Chapter, American Academy of Pediatrics Business Meeting** Presiding — H. J. Kuehn, M.D., Chapter Chairman, Omaha

The objective of this course is to update the pediatrician and family physician in new drugs and treatments in the pediatric patient.

PROGRAM

SATURDAY MORNING, APRIL 26

9:00 a.m.
to
11:00 a.m.

Dermatology

Beatrice Suite

Sponsored by —
Missouri Valley Dermatologic Society

Program Chairman —
Stephen C. Papenfuss, M.D., Omaha

Dermatology Update 1986
Moderator — Christopher P. Crotty, M.D., Omaha

9:00 **Panel Discussion: Dermatology Update — Common Dermatoses And Tumors**
John J. Ferguson, M.D., Omaha
Gordon E. Fredrickson, M.D., Omaha
Ann E. Lott, M.D., Lincoln
Elliott L. Rustad, M.D., Lincoln

Moderator — John R. Luckasen, M.D., Omaha

10:00 **Panel Discussion: Dermatology Update — Recent Advancements In Dermatology And Dermatologic Surgery**
Rodney S. W. Basler, M.D., Lincoln
David A. Bigler, M.D., Lincoln
Richard Q. Crotty, M.D., Omaha
Robert Fonda, M.D., Omaha
Rudolf Strnot, Jr., M.D., Lincoln

The objective of this course is to present an update on dermatologic diagnostic and treatment techniques.

SATURDAY MORNING, APRIL 26

10:00 a.m.
to
1:00 p.m.

Obstetrics & Gynecology

Salon A

Sponsored by —
Nebraska Section, American College of Obstetricians & Gynecologists

10:00 **Annual Business Meeting**
Presiding — Larry E. Roffman, M.D., Section Chairman, Omaha

11:30 **Break**

12:00 **Luncheon**

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PROGRAM

SATURDAY MORNING, APRIL 26

10:00 a.m.
to
1:00 p.m.

Otolaryngology

Fremont Suite

Sponsored by —
Nebraska Academy Of Otolaryngology

Program Chairman & Moderator —
Frederic Ogren, M.D., Omaha

10:00 **Surgical Aspects Of Salivary Gland Disease**
C. T. Yarington, Jr., M.D., Seattle, Washington

11:00 **Pros And Cons Of Caldwell-LUC Operation**
C. T. Yarington, Jr., M.D., Seattle, Washington

12:00 **Luncheon** — Chardonnay

This program will cover the surgical aspects of salivary gland disease and the pros and cons of the Caldwell-Luc operation.

SATURDAY MORNING, APRIL 26

10:00 a.m.
to
11:30 a.m.

Plastic & Reconstructive Surgery

Room 253
Sponsored by —
Nebraska Society Of Plastic & Reconstructive Surgeons

Program Chairman —
John J. Heieck, M.D., Omaha

10:00 **Business Meeting**
Presiding — John J. Heieck, M.D., President, Omaha

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DAILY SCHEDULE

THURSDAY, APRIL 24

GENERAL REGISTRATION: 7:00 a.m., Ballroom Foyer, Omaha Marriott Hotel

Perinatal Workshop

Scientific Program, 8:00 a.m.-5:00 p.m., Salon D & E
Business Meeting & Luncheon, 12:15 p.m.-1:30 p.m., Salon E
Nebraska Perinatal Organization Wine & Cheese Party, 6:00 p.m., Salon D & E

FRIDAY, APRIL 25

GENERAL REGISTRATION: 7:00 a.m., Ballroom Foyer, Omaha Marriott Hotel

Cardiology

Scientific Program, 7:30 a.m.-12:00 noon, Salon D & E

Honors Luncheon

50-Year Practitioner and NMA Past Presidents' Luncheon, 12:00 noon, Nebraska Suite B

NMA Business Sessions

Board of Directors, 7:00 a.m., Lincoln Suite
Board of Councilors, 10:00 a.m., Columbus Suite
House of Delegates, 1:30 p.m., Salon C, D, & E
Nominating Committee, 4:00 p.m., Columbus Suite

Perinatal Workshop

Scientific Program, 8:40 a.m.-4:25 p.m., Salon A & B
Luncheon, 11:30 a.m., Salon A & B

Socio-Economic

Reception, 5:30 p.m., Salon E
Dinner and Program, 6:00 p.m.-8:00 p.m., Salon C & D

SATURDAY, APRIL 26

GENERAL REGISTRATION: 7:00 a.m., Ballroom Foyer, Omaha Marriott Hotel

General Session

Breakfast Program, 7:00 a.m.-8:30 a.m., Salon A
Subject: Child Sexual Abuse

Allergy

Scientific Program, 8:00 a.m.-10:00 a.m., Salon E

Anesthesiology

Scientific Program, 1:00 p.m.-5:00 p.m., Fremont Suite

Dermatology

Scientific Program, 9:00 a.m.-11:00 a.m., Beatrice Suite

NMA Business Sessions

Nominating Committee, 9:00 a.m., Salon B

Obstetrics & Gynecology

Business Meeting, Nebraska Section, American College of Obstetricians & Gynecologists, 10:00 a.m.-11:30 a.m., Salon A
Luncheon, Nebraska Section, American College of Obstetricians & Gynecologists, 12:00 noon, Salon A

Ophthalmology

Scientific Program, 8:30 a.m.-12:00 noon, Nebraska A & B
Luncheon, Nebraska Academy of Ophthalmology with the National Society to Prevent Blindness, Nebraska Affiliate, 12:00 noon, Nebraska A & B
Scientific Program, 2:00 p.m.-4:00 p.m., Beatrice Suite
Business Meeting, Nebraska Academy of Ophthalmology, 4:00 p.m., Beatrice Suite

Otolaryngology

Scientific Program, 10:00 a.m.-12:00 noon, Fremont Suite
Luncheon, 12:00 noon, Chardonnay

Pediatrics

Scientific Program, 9:00 a.m.-3:45 p.m., Salon D
Luncheon for Chapter Members, Nebraska Chapter, American Academy of Pediatrics, 12:00 noon, Columbus Suite
Business Meeting, Nebraska Chapter, American Academy of Pediatrics, 4:00 p.m., Salon D

Plastic & Reconstructive Surgery

Business Meeting, Nebraska Society of Plastic & Reconstructive Surgeons, 10:00 a.m.-11:30 a.m., Room 253

Psychiatry

Scientific Program, 1:00 p.m.-4:00 p.m, Salon E

Surgery

Scientific Program, 10:00 a.m.-5:00 p.m. Salon C
Luncheon, Nebraska Chapter, American College of Surgeons, 12:00 noon, Salon B
Business Meeting, Nebraska Chapter, American College of Surgeons, 5:00 p.m., Salon C

Thoracic Medicine

Scientific Program, 10:00 a.m.-12:00 noon, Salon E
Luncheon, 12:00 noon, Lincoln Suite

Alumni Meeting

University of Nebraska College of Medicine Annual Alumni Meeting and Social Hour, 4:30 p.m., Lincoln Suite

SATURDAY EVENING

Fun Night, 6:30 p.m.-cocktails, 8:00 p.m.-dinner, Erin Court Convention Center, 4714 North 120th Street, Omaha

SUNDAY, APRIL 27

GENERAL REGISTRATION: 7:00 a.m., Ballroom Foyer, Omaha Marriott Hotel

Emergency Medicine

Scientific Program, 1:30 p.m.-3:30 p.m., Salon A

General Session

Breakfast Program, 8:00 a.m.-9:30 a.m., Salon A
Subject: Medicare

NMA Business Sessions

House of Delegates, 9:30 a.m.-11:30 a.m., Salon B, C, D, & E
4:00 p.m.-5:00 p.m., Salon B, C, D, & E
Medicine & Religion Luncheon, 11:30 a.m., Nebraska A & B

SUNDAY EVENING

Presidents' Reception for Physicians and Spouses, 6:00 p.m., Salon A & B
Inaugural Banquet for Physicians and Spouses, 7:00 p.m., Salon C, D, & E

MONDAY, APRIL 28

Sportsman's Day

NMA Mini Marathon, 7:00 a.m., Around and through Regency
Sportsman's Day Luncheon Buffet, 11:00 a.m., Highlands Country Club, 12627 Pacific Street, Omaha
Tennis Tournament, 12:00 noon-6:00 p.m., location to be announced
Golf Tournament, 1:00 p.m., Highland Country Club, 12627 Pacific Street, Omaha
Sportsman's Day Luncheon Buffet, 11:00 a.m., Highland Country 12627 Pacific Street, Omaha
Sportsman's Annual Award Dinner, 7:00 p.m., Highland Country Club, 12627 Pacific Street, Omaha

PROGRAM

SATURDAY, APRIL 26

10:00 a.m.
to
5:00 p.m.
Surgery
Salon C

Sponsored by —
Nebraska Chapter, American College of Surgeons

Program Chairman —
Scott G. Rose, M.D., F.A.C.S., Omaha

10:00 **Functional Results Of Restorative Proctocolectomy In The Management Of Chronic Ulcerative Colitis**
Alan G. Thorson, M.D., Omaha
Mark A. Christensen, M.D., Omaha
John H. Brush, M.D., Omaha
J. B. Christensen, M.D., Omaha

10:15 **Experience With Continence-Preserving Procedures At University Hospital**
Jon S. Thompson, M.D., Omaha

10:30 **Surgical Management Of Inflammatory Disease Of The Colon**
Garnet Davis, M.D., Omaha
Jon S. Thompson, M.D., Omaha

10:45 **Bleeding Peptic Ulcer In The Elderly — Long Term Follow Up**
A. Roy-Shapira, M.D., Omaha
T. Judge, M.D., Omaha
D. Hirai, M.D., Omaha

11:00 **Management Of Biliary Cutaneous Fistulas**
C. Ozaki, M.D., Omaha
L. Rikkers, M.D., Omaha
D. Burnett, M.D., Omaha
J. Thompson, M.D., Omaha

11:15 **Strangulated Testes In Incarcerated Hernias Of Childhood**
Ronald R. Hollins, M.D., Omaha
Lewis W. Pinch, M.D., Omaha
Loyd R. Schultz, M.D., Omaha

11:30 **Adrenocortical Carcinoma — A Case Report And Review Of Ten Years Experience At The University Of Nebraska Affiliated Hospitals**
Garth A. Gemar, M.D., Omaha
F. Wm. Karrer, M.D., Omaha
B. J. Moor, M.D., Omaha
Scott G. Rose, M.D., Omaha
Timothy Wahl, M.D., Omaha
Robert Lynch, M.D., Omaha

11:45 **Liver Transplantation**
R. Patrick Wood, M.D., Omaha
Byers W. Shaw, Jr., M.D., Omaha

12:00 **Luncheon** — Salon B

1:00 **Management Of Obstructing Candidiasis Of The Urinary Tract In Infants**
Eduardo L. Rojas, M.D., Omaha
Francis F. Bartone, M.D., F.A.C.S., F.A.A.P., Omaha

1:15 **Extreme Hyperemesis Gravidarium Requiring Total Parenteral Nutrition**
Stephen C. Raynor, M.D., Omaha
Scott Rose, M.D., Omaha
F. Wm. Karrer, M.D., Omaha
B. J. Moor, M.D., Omaha

1:30 **Advances And Innovations In Craniofacial Trauma**
R. Coleen Stice, M.D., Omaha

1:45 **Brain Abscess: Management And Serial CT Scan Evolution**
Gbaranen B. M. Gbaanador, M.D., Omaha
Charles Taylon, M.D., Omaha

2:00 **Rationale For The Evolution In The Treatment of Breast Cancer**
Gary Anthone, M.D., Omaha
Robert Fitzgibbons, Jr., M.D., Omaha

2:15 **Breast Biopsies, Mammograms, And Unsuspected Cancers**
James Adwers, M.D., F.A.C.S., Omaha
D. R. Owen, M.D., F.A.C.S., Omaha

2:30 **Peripheral Balloon Angioplasty Five Year Experience**
Eugene A. Waltke, M.D., Omaha
John W. Smith, M.D., Omaha

2:45 **Break**

3:00 **Splenic Artery Aneurysm: An Unusual Case Presentation**
Stephen J. Dreyer, M.D., Fremont

3:15 **Cystic Adventitial Degeneration Of The Femoral Artery**
Gary Anthone, M.D., Omaha
Luca di Marzo, M.D., Omaha
Chhandra Bewtra, M.D., Omaha
Richard D. Schulz, M.D., Omaha
Richard J. Feldhaus, M.D., F.A.C.S., Omaha
Dwaine J. Peetz, Jr., M.D., F.A.C.S., Omaha

3:30 **Initial Experience With In-Situ Saphenous Vein Bypass For Lower Extremity Ischemia**
Chris Olson, B.S., Omaha
John W. Smith, M.D., F.A.C.S., Omaha
Eugene Waltke, M.D., Omaha

3:45 **The Workup And Management Of CSF Rhinorrhea**
Dwight T. Jones, M.D., Omaha
Gary F. Moore, M.D., Omaha
Anthony J. Yonkers, M.D., F.A.C.S., Omaha

4:00 **The Use Of Silastic Prosthetics In The Reconstruction Of Nasal Facial Deformities**
Gary F. Moore, M.D., Omaha
C. Scott Howe, M.D., Omaha
Anthony J. Yonkers, M.D., Omaha

4:15 **Cystic Hygromas In Children**
Ronald R. Hollins, M.D., Omaha
Lewis W. Pinch, M.D., Omaha
Loyd R. Schultz, M.D., Omaha

4:30 **Cervical Teratoma In The Newborn**
Gbaranen B. M. Gbaanador, M.D., Omaha
Lewis Pinch, M.D., F.A.C.S., Omaha

4:45 **Benign Solitary Neurilemomas-Pitfalls And Principles**
A. Roy-Shapira, M.D., Omaha
L. D. Barkmeier, M.D., Omaha
Denitsu Hirai, M.D., F.A.C.S., Lincoln

5:00 **Business Meeting**

SATURDAY

PROGRAM

SATURDAY AFTERNOON, APRIL 26

1:00 p.m. to 5:00 p.m. **Anesthesiology**
Fremont Suite

Sponsored by —
Nebraska Society Of Anesthesiologists

Program Chairman and Moderator —
K. Reed Peters, M.D., Omaha

Clinical Update In Anesthesiology

1:00 **Anesthetic Management For Liver Transplantation**
James W. Chapin, M.D., Omaha

1:30 **Questions & Answers**

1:45 **Surgical Management Of The Liver Transplant Patient**
Byers W. Shaw, Jr., M.D., Omaha

2:15 **Questions & Answers**

2:30 **The Clinical Use Of Midazolam**
Robert J. Fragen, M.D., Chicago, Illinois
Sponsored by Roche Laboratories

3:15 **Questions & Answers**

3:30 **Coffee Break**

3:45 **Implications Of AIDS For Health Care Personnel**
Jonathan C. Goldsmith, M.D., Omaha

4:30 **Questions & Answers**

The first session will present a review of the surgical and anesthesia care for an adult or child undergoing liver transplantation. The second session will instruct the clinician on the background information of Midazolam for clinical use of this drug. The final session will present a clinical update of AIDS and the implications for health personnel involved in caring for the patient with AIDS.

PROGRAM

SATURDAY AFTERNOON, APRIL 26

1:00 p.m. to 4:00 p.m. **Psychiatry**
Salon E

Sponsored by —
Nebraska Psychiatric Society

Program Chairman and Moderator —
David L. Sudduth, M.D., Omaha

The Difficult Patient

1:00 **Masked Depression**
Emmet Kenny, M.D., Omaha

1:30 **Alcoholism**
Donald E. Fischer, M.D., North Platte

2:00 **Conversion Disorder**
Donald A. Swanson, M.D., Omaha

2:30 **Somatization Disorder**
Robert Dale Jones, M.D., Omaha

3:00 **The Difficult Patient**
Panel Discussion
Donald E. Fischer, M.D., North Platte
Robert Dale Jones, M.D., Omaha
Emmet Kenny, M.D., Omaha
Donald A. Swanson, M.D., Omaha

This course will discuss the evaluation and treatment of patients whose physical symptoms and complaints are either caused or exacerbated by their emotional problems. Frequently these patients resist referral and psychiatric treatment and the family practitioner or internist must consequently manage their treatment. This short course will discuss evaluation procedures and useful management techniques.

PROGRAM

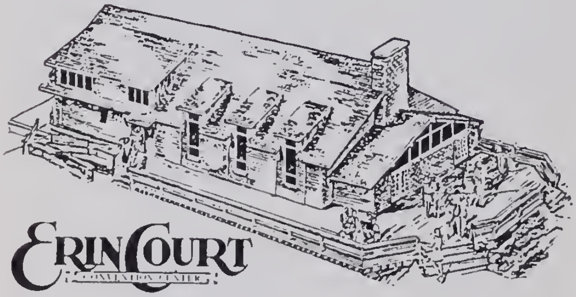
SATURDAY, APRIL 26

4:30 p.m. **University Of Nebraska College Of Medicine Annual Alumni Meeting & Social Hour**
Lincoln Suite

1986 Annual Session Fun Night
Erin Court and Convention Center
4714 North 120th Street, Omaha

6:30 Cocktails & Entertainment by the Strolling Mandoliers

8:00 Dinner & Dancing at Omaha's beauitful Erin Court



PROGRAM

SUNDAY, APRIL 27

8:00 a.m. to 9:30 a.m. **GENERAL SESSION**
Salon A

Sponsored by —
Nebraska Medical Association

Presiding — Francis D. Donahue, M.D., Omaha

Is There A Medicare In Our Future?
Jerald R. Schenken, M.D., Omaha
Member, AMA Board of Trustees

Jerald R. Schenken, M.D.

11:30 **Medicine & Religion Luncheon —**
For Physicians and their Spouses
Nebraska A & B
Presiding — Francis D. Donahue, M.D., Omaha

Rationing Health Care — An Ethical Dilemma
Fr. Dr. Robert F. Park, Kearney
Practicing Physician/Episcopal Priest

PROGRAM

SUNDAY AFTERNOON, APRIL 27

1:30 p.m. to 3:30 p.m. **Emergency Medicine**
Salon A

Sponsored by —
Nebraska Chapter, American College Of Emergency Physicians

Program Chairmen —
Steven A. Schwid, M.D., Omaha
Robert M. Stryker, M.D., Omaha

Moderator — Steven A. Schwid, M.D., Omaha

1:30 **Hyperbaric Oxygen Therapy**
Lon W. Keim, M.D., Omaha

2:15 **Questions & Answers**

2:30 **Selection Of Patients For Immediate Reopening Of Coronary Artery Obstruction**
Ronald A. Draur, M.D., Omaha
James R. Morgan, M.D., Omaha

3:15 **Questions & Answers**

The first presentation is to introduce the basic concepts of hyperbaric oxygen therapy and review its clinical applications. The second presentation is to review the reasons for immediate reopening of obstructed coronary arteries and the means of finding candidates for this procedure.

PROGRAM

SUNDAY, APRIL 27

6:00 p.m. **Presidents' Reception —**
For Physicians and their Spouses,
Salon A & B
Honoring the President of the Nebraska Medical Association and the President of the Nebraska Medical Association Auxiliary

7:00 p.m. **Inaugural Banquet —**
All physicians and spouses are cordially invited to attend the inauguration of
Hiram R. Walker, M.D.
Salon C, D, & E
Presiding — Perry T. Williams, M.D.
President, Metro Omaha Medical Society

Installation of Hiram R. Walker, M.D.

Future Directions Of Health Care
Harrison L. Rogers, Jr., M.D.
Atlanta, Georgia
President, American Medical Association

Hiram R. Walker, M.D.

Harrison L. Rogers, Jr., M.D.

GUEST FACULTY

Nebraska Allergy Society
Harold S. Nelson, M.D., Col., USA
Chief of Allergy Services
Fitzsimmons Medical Center
Denver, Colorado

Nebraska Society of Anesthesiologists
Robert J. Fragen, M.D.
Clinical Professor
Department of Anesthesiology
Northwestern Memorial Hospital
Chicago, Illinois

American Heart Association, Nebraska Affiliate, Douglas/Sarpy Division
Calvin F. Fuhrmann, M.D., P.A.
Chief, Respiratory Division
South Baltimore General Hospital
Medical Director, Life Resources, Inc.
Baltimore, Maryland

Nebraska Academy of Ophthalmology
Thomas J. Roussel, M.D.
Bascom Palmer Eye Institute
Miami, Florida

Nebraska Academy of Otolaryngology
C. T. Yarington, Jr., M.D.
Chief of Otolaryngology
Virginia Mason Clinic
Seattle, Washington

Nebraska Perinatal Organization
Mike Duytschaver, C.R.T.T.
Respiratory Care Coordinator
Helget, Inc.
Iowa City, Iowa

Harry Farb, M.D.
Director of Maternal-Fetal Medicine
North Memorial Perinatal Center
Minneapolis, Minnesota

Fred Hall, M.D.
Staff Neonatologist
Children's Mercy Hospital
Kansas City, Missouri

Kimberly Ford Kocur, R.N.
High-risk Antepartum Nurse
Pediatric Office Nurse
Chicago, Illinois

Susan McKay, R.N., Ph.D.
Psychologist
Assistant to the Dean for Student Academic Programs
University of Wyoming
Laramie, Wyoming

Bonnie Worthington Roberts, Ph.D.
Professor of Nutrition Science
University of Washington
Seattle, Washington

Nebraska Thoracic Society
John C. McDougal, M.D.
Thoracic Disease Section
Mayo Clinic
Rochester, Minnesota

State of Nebraska, Dept. of Social Services
Donna A. Rosenberg, M.D.
Assistant Professor of Pediatrics
Director, Child Protection Team
University of Colorado Health Sciences Center &
C. Henry Kempe National Center for the Prevention
and Treatment of Child Abuse and Neglect
Denver, Colorado

61st Annual Meeting of the Nebraska Medical Association Auxiliary

If your physician spouse is eligible to be a Nebraska Medical Association member, you are eligible to be a member of the Auxiliary. Please join us for any or all of the scheduled activities.

WE WELCOME YOU!

Auxiliary PROGRAM

MRS. LESLIE GRACE
Blair, Nebraska
President 1985-86

MRS. ROBERT KRUGER
Omaha, Nebraska
President 1986-87

MRS. CLAIR CAVANAUGH
North Central Region
Vice-President
Great Bend, Kansas

61st Annual Meeting of the Nebraska Medical Association Auxiliary

A CORDIAL INVITATION IS EXTENDED TO EACH PHYSICIAN'S SPOUSE IN NEBRASKA. WE INVITE YOU TO REGISTER AND ATTEND ALL OF OUR ACTIVITIES. WELCOME TO OMAHA!

Registration: Ballroom Foyer, Omaha Marriott Hotel
Friday, April 25, 1986 - 9:00 a.m. to 10:00 a.m. and 12:00 noon to 1:00 p.m.
Saturday, April 26, 1986 - Omaha Country Club, 9:15 a.m. to 10:00 a.m.

Convention Committee Chairmen - 1986

General Chairman:
Mrs. Daniel Bohi (Barbara)

General Co-Chairman:
Mrs. John Haggstrom (Janis)

Advisors:
Mrs. John Haggstrom (Janis)
Mrs. Robert Kruger (Bev)
Mrs. Stephen Nielsen (Nancy)

Registration:
Mrs. Ronald Wax (Linda)

Reservations:
Mrs. John Haggstrom (Janis)

Publicity:
Mrs. James Adwers (Mary)

Correspondence:
Mrs. Gordon Fredrickson (Nev)

Courtesy:
Mrs. Michael Sorrell (Shirley)
Mrs. Robert Kruger (Bev)
Mrs. Richard Meissner (Carolyn)

Luncheon Arrangements:
Mrs. John Luckasen (Jean)

Friday Night Dinner:
Mrs. C. Lee Retelsdorf (Cheri)

Brunch:
Mrs. James Elston (Jill)

Decorations:
Mrs. Hal Mardis (Janet)

Auxiliary
PROGRAM

FRIDAY, APRIL 25, 1986

9:00 a.m. **Registration** — Ballroom Foyer,
Omaha Marriott Hotel
9:00 a.m. to 10:00 a.m.
12:00 noon to 1:00 p.m.

10:00 a.m. **Annual Board Meeting** — Fremont Suite
All Members Welcome
Mrs. Leslie Grace (Ardis), NMA Auxiliary President, Presiding

12:00 noon **Luncheon** — Lincoln Suite
All Members Welcome

1:00 p.m. **Seminar** — Fremont Suite
A View From Age: Try To See It Their Way
Jane F. Potter, M.D., Chief — Section of Geriatrics and Gerontology, Department of Internal Medicine, UNMC

6:30 p.m. **Dinner** — Home of Mrs. Daniel Bohi
707 North 69th Street

Please sign at the Registration Desk if transportation is needed to the dinner. Meet in the Marriott Lobby at 6:15 p.m. for departure. Maps are available at the Registration Desk for those of you driving yourselves.

SATURDAY, APRIL 26, 1986

9:15 a.m. **Registration** — Omaha Country Club
6900 Country Club Road
9:15 a.m. to 10:00 a.m.

9:15 a.m. **Gavel Club Meeting** — Omaha Country Club

10:00 a.m. **Awards Brunch** — Omaha Country Club
Informal modeling by Nan C

Special Guest:
Mrs. Clair Cavanaugh (Jean), Vice President
North Central Region of the AMAA
Great Bend, Kansas

Presentation of Awards

Installation of Officers

Post-Convention Board Meeting

2:30 p.m. **Symphony Showhouse Tour**

Transportation will be available to Omaha Country Club and the Showhouse. Please sign up at the Registration Desk, if you require a ride. Departure for Omaha Country Club at 9:30 a.m. from the Marriott Lobby and from Omaha Country Club for the Showhouse immediately following the conclusion of the Post-Convention Board Meeting.

Fun Night For Physicians And Spouses

6:30 p.m. **Reception**

8:00 p.m. **Dinner & Entertainment**

Auxiliary
PROGRAM

SUNDAY, APRIL 27, 1986

9:30 a.m. **House Of Delegates, Nebraska Medical Association**
Salons B, C, D, & E
Presentation of AMA Education and Research Foundation Checks
Presentation of Nebraska Medical Foundation Student Research Scholarship Program Checks

11:30 a.m. **Medicine & Religion Luncheon**
Nebraska A & B
Rationing Health Care — An Ethical Dilemma
Fr. Dr. Robert F. Park, Kearney
Practicing Physician/Episcopal Priest

6:00 p.m. **President's Reception** — Salon A & B
Honoring the President of the Nebraska Medical Association and the President of the Nebraska Medical Association Auxiliary

7:00 p.m. **Inaugural Banquet** — Grand Ballroom
Installation of Hiram R. Walker, M.D.
Future Directions of Health Care
Harrison L. Rogers, Jr., M.D., Atlanta, Georgia

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Nebraska Medical Association

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A. Bowen, M.D., Nebraska City	1872-73
H. P. Mathewson, M.D., Omaha	1873-74
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J. P. Peck, M.D., Omaha	1876-77
L. J. Abbott, M.D., Fremont	1877-78
E. M. Whitten, M.D., Nebraska City	1878-79
Harvey Link, M.D., Millard	1879-80
S. D. Mercer, M.D., Omaha	1880-81
M. W. Stone, M.D., South Omaha	1881-82
A. H. Sowers, M.D., Lincoln	1882-83
Victor H. Coffman, M.D., Omaha	1883-84
F. G. Fuller, M.D., Grand Island	1884-85
W. W. Knapp, M.D., Lincoln	1885-86
Richard C. Moore, M.D., Omaha	1886-87
George H. Peebles, M.D., Lincoln	1887-88
Milton Lane, M.D., Kearney	1888-89
J. C. Denise, M.D., Omaha	1889-90
D. A. Walden, M.D., Beatrice	1890-91
Charles Inches, M.D., Scribner	1891-92
M. L. Hildreth, M.D., Lyons	1892-93
A. S. von Mansfelde, M.D., Ashland	1893-94
H. B. Lowry, M.D., Lincoln	1894-95
J. E. Summers, M.D., Omaha	1895-96
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Wilson O. Bridges, M.D., Omaha	1897-98
A. R. Mitchell, M.D., Lincoln	1898-99
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A. B. Anderson, M.D., Pawnee City	1902-03
B. F. Crummer, M.D., Omaha	1903-04
R. C. McDonald, M.D., Fremont	1904-05
A. F. Jonas, M.D., Omaha	1905-06
F. A. Long, M.D., Madison	1906-07
Harold Gifford, M.D., Omaha	1907-08
L. M. Shaw, M.D., Osceola	1908-09
P. H. Salter, M.D., Norfolk	1909-10
J. P. Lord, M.D., Omaha	1910-11
A. D. Nesbit, M.D., Tekamah	1911-12
I. N. Pickett, M.D., Odell	1912-13
D. C. Bryant, M.D., Omaha	1913-14
J. P. Gilligan, M.D., O'Neill	1914-15
E. W. Rowe, M.D., Lincoln	1915-16
W. F. Milroy, M.D., Omaha	1916-17 (to 12-31-17)
C. L. Mullins, M.D., Broken Bow	1918
J. M. Bannister, M.D., Omaha	1919
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H. J. Lehnhoff, M.D., Lincoln	1926
H. E. Potter, M.D., Fairbury	1927
B. R. McGrath, M.D., Grand Island	1928-29 (to 5-14-29)
F. S. Owen, M.D., Omaha	1929-30
K. S. J. Hohlen, M.D., Lincoln	1930-31
Lucien Stark, M.D., Norfolk	1931-32
A. E. Cook, M.D., Randolph	1932-33
Adolph Sachs, M.D., Omaha	1933-34
Joseph Bixby, M.D., Geneva	1934-35
Claude A. Selby, M.D., North Platte	1935-36
George W. Covey, M.D., Lincoln	1936-37
R. W. Fouts, M.D., Omaha	1937-38
Homer Davis, M.D., Genoa	1938-39
A. L. Miller, M.D., Kimball	1939-40
Clayton F. Andrews, M.D., Lincoln	1940-41
W. P. Wherry, M.D., Omaha	1941-42
Dexter D. King, M.D., York	1942-43
A. L. Cooper, M.D., Scottsbluff	1943-44
Floyd L. Rogers, M.D., Lincoln	1944-45
Charles McMartin, M.D., Omaha	1945-46
Earle G. Johnson, M.D., Grand Island	1946-47
G. E. Charlton, M.D., Norfolk	1947-48
J. E. M. Thomson, M.D., Lincoln	1948-49
J. D. McCarthy, M.D., Omaha	1949-50
C. H. Sheets, M.D., Cozad	1950-51
D. B. Steenburg, M.D., Aurora	1951-52
Harold S. Morgan, M.D., Lincoln	1952-53
James F. Kelly, M.D., Omaha	1953-54
Earl F. Leininger, M.D., McCook	1954-55
Wm. E. Wright, M.D., Creighton	1955-56
J. M. Woodward, M.D., Lincoln	1956-57
R. Russell Best, M.D., Omaha	1957-58
Fay Smith, M.D., Imperial	1958-59
E. E. Koebbe, M.D., Columbus	1959-60
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Carlyle E. Wilson, Jr., M.D., Borrego Springs, CA	1981-82
Allan C. Landers, M.D., Scottsbluff	1982-83
Dwaine J. Peetz, M.D., Neligh	1983-84
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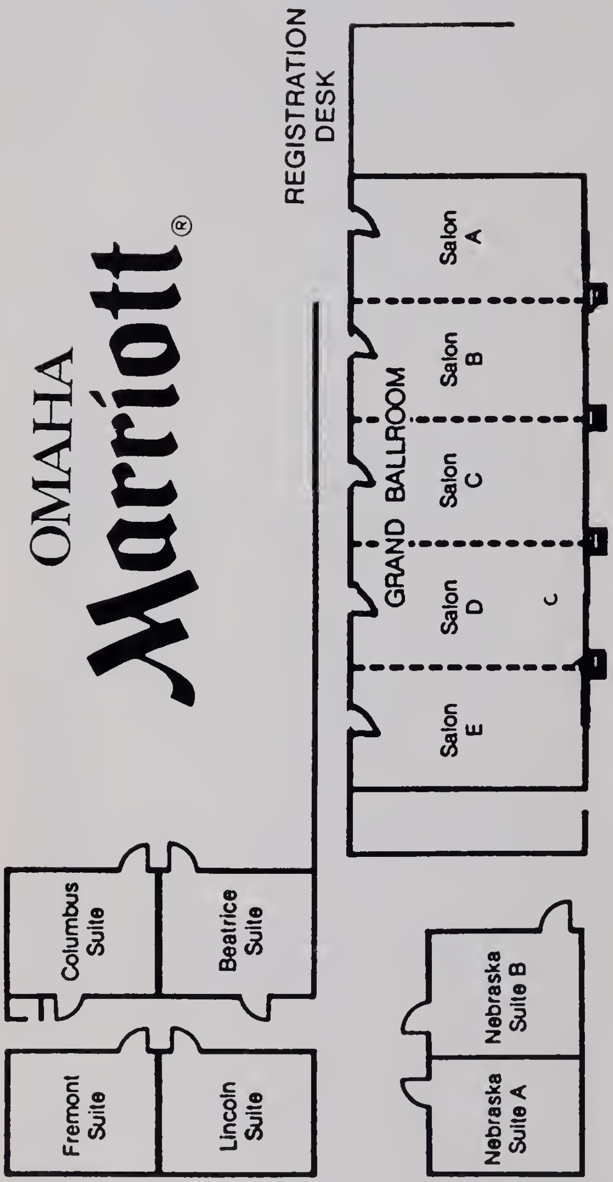

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ibuprofen

Extra strength
Convenience
Economy

Upjohn
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The Upjohn Company

J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* **WARNING**

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired. If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. Associated widened QRS complex or arrhythmia requires prompt additional therapy. Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of Dyrenium (triamterene, SK&F CO.) and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function.

Thiazides may add to or potentiate the action of other antihypertensive drugs.

Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.
BRS-DZ:L39

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When You Need to
Conserve K+

Remember the Unique
Red and White Capsule:
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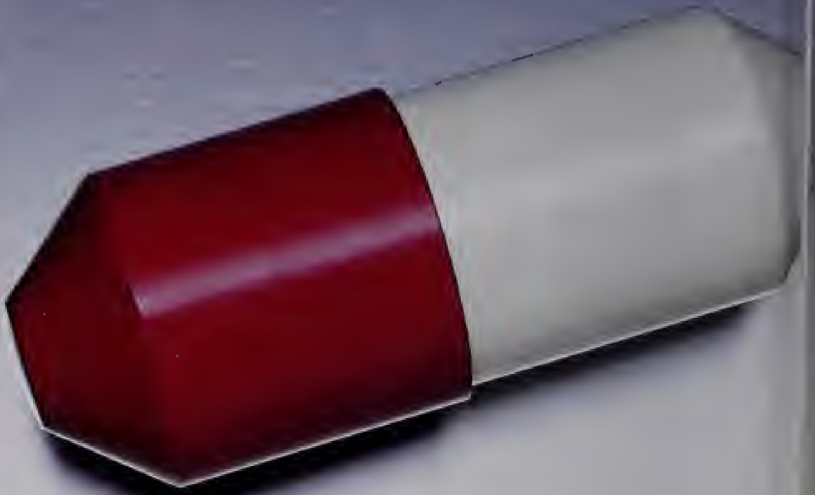
Serum K+ and BUN should be checked periodically (see Warnings and Pr



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25 mg Hydrochlorothiazide/**50 mg** Triamterene/SKF

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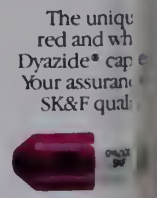

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7377 Pacific St., Ste. 216A, Omaha 68114

American Heart Association, Nebraska Affiliate
Dennis N. Nissen, Executive Director
3624 Farnam St., Omaha 68131

American Lung Association of Nebraska
8901 Indian Hills Dr., Ste. 107, Omaha 68114

American Red Cross
P.O. Box 83267
1701 "E" St., Lincoln 68501

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76th & Main, Ralston 68127

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Nebraska Department of Education
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Division of Rehabilitation Services for the Visually Impaired
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4600 Valley Road, Lincoln 68510

Easter Seal Society of Nebraska
Mr. Joe Wilson, Executive Director
12177 Pacific St., Omaha 68154

Health Manpower Referral Service, State of Nebraska
P.O. Box 95007
3rd Floor, State Office, 301 Centennial Mall South
Lincoln 68509

Lincoln Council on Alcoholism and Drugs, Inc.
Room 212, 215 Centennial Mall, Lincoln 68508

March of Dimes — Birth Defects Foundation
1618 L Street, Lincoln 68508

MID-PLAINS POISON CONTROL CENTER
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(402) 390-5400 or 800-642-9999 (toll free Nebraska)

Missouri Valley Dermatologic Society
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634 Doctors Bldg., Omaha 68131

Muscular Dystrophy Association
1912 No. 90th St., Lower Level, Omaha 68114

National Kidney Foundation of Nebraska
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2217 No. 91st Plaza, Omaha 68134
(402) 397-9234 — NE toll free 800-642-1255

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Nebraska Nurses Association
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566 So. 70th St., Lincoln 68510

Nebraska Pharmacists Association
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Joyce Richter, Client Services Rep.
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(Continued from page 14-A)

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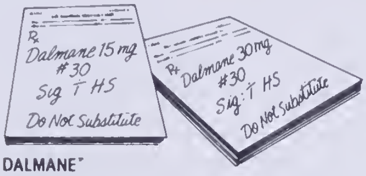

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118 Years

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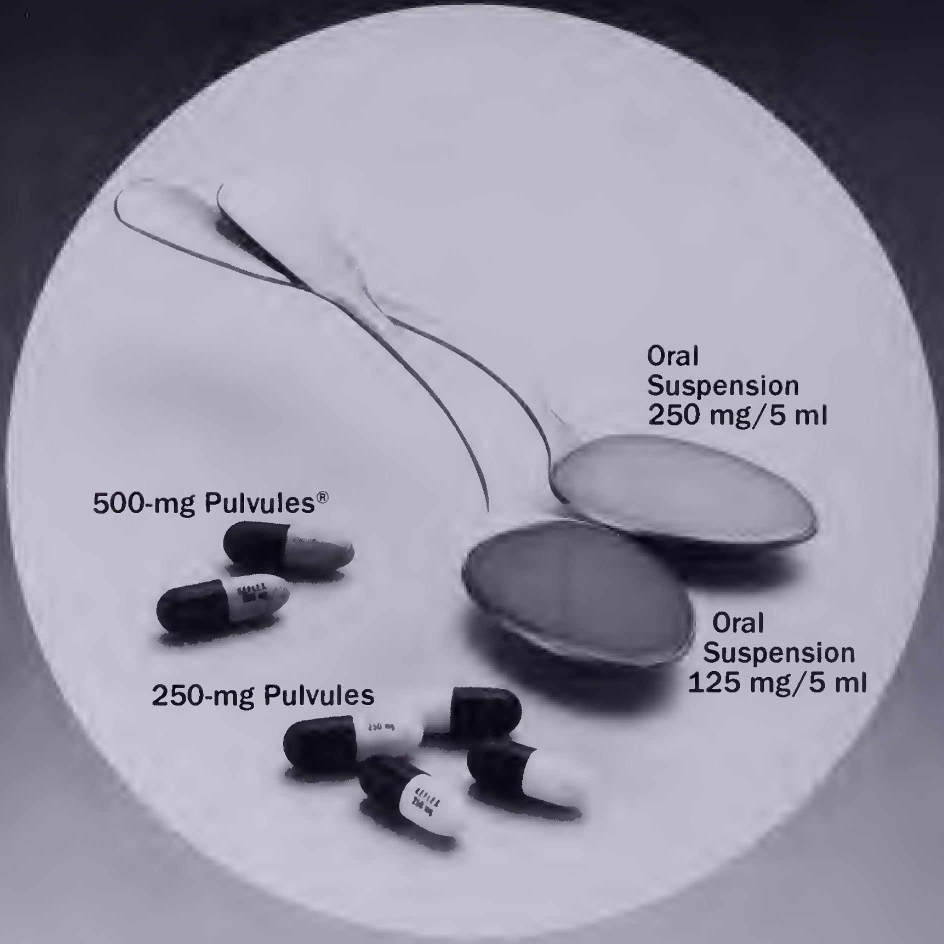

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5505 Ellendale Road,
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Address all correspondence relating to subscriptions, advertising or address changes to Mr. Ken Neff, Business Manager, 1512 First National Bank Building, Lincoln, Nebraska 68508. Phone (402) 474-4472.

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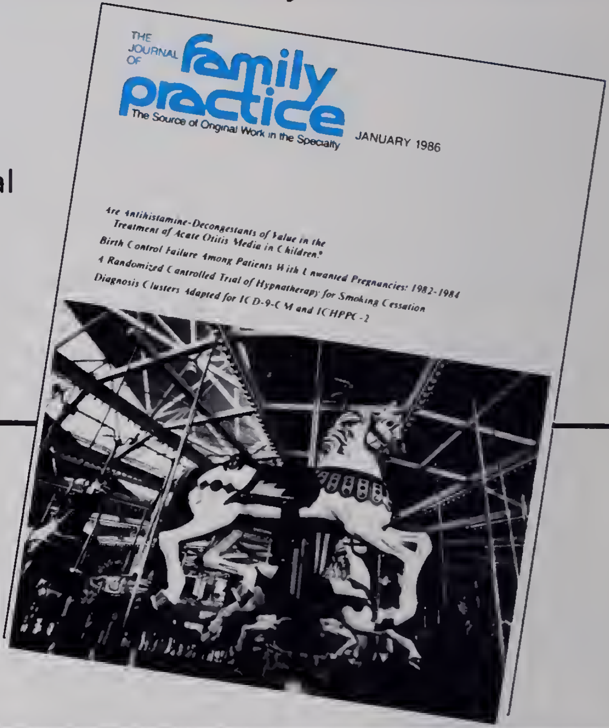
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JANUARY 1986

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AMA News Notes

The AMA and A Broad-Based Group of medical and health organizations have called on Congress to reject arbitrary budget cuts in federal health programs and to agree upon reasonable targeted reductions instead. The appeal was made in a joint letter signed by 108 professional associations and other organizations directly concerned with the provision of medical health care. Among the signatories were the AFL-CIO, the American Assn. of Retired Persons, the Assn. of American Universities, and the Health Insurance Assn. of America.

The letter, which was sent to all members of Congress, says: "The undersigned organizations are concerned about federal budget deficits, but we insist on the need for a balanced solution to that problem. Therefore, we are deeply disturbed by continued efforts to cut public health programs, including health research and education, in a disproportionate manner."

The letter goes on to outline the various cuts to Medicare and Medicaid in the past five years, and also outlines the various cuts proposed for the programs in the Administration's 1987 budget. It adds: "These proposals would adversely impact the quality of services and access to needed health care by elderly and poor patients. Neither government nor providers can be expected to continue to deliver more care to more people for less money." The letter concludes by urging Congress "to adopt a budget resolution that rejects such arbitrary and unfair health cuts and establishes reasonable targets for health programs in the fiscal 1987 budget resolution."

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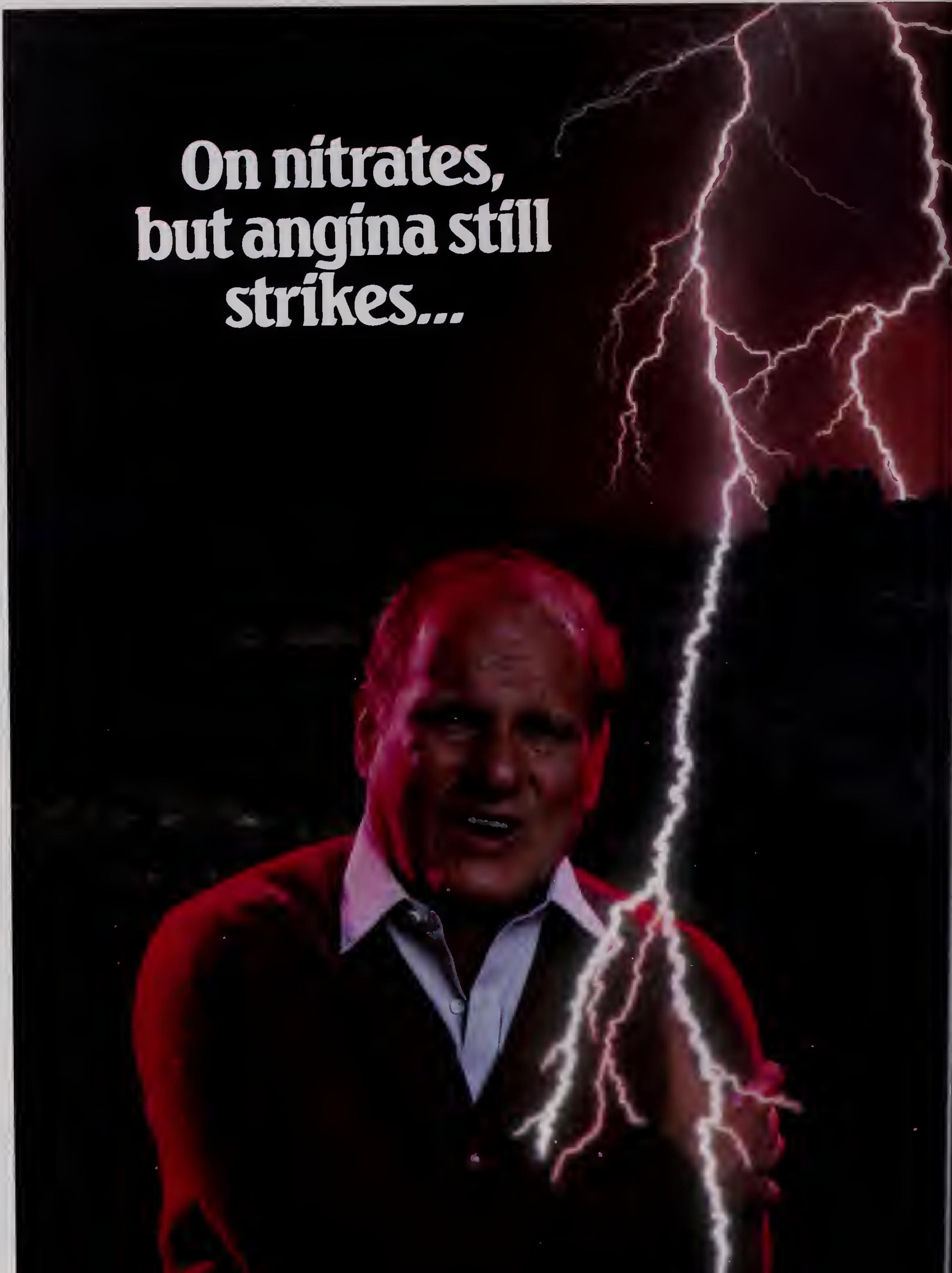
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Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.*) Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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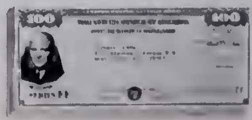

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AMA
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AMA News Notes

A Bill That Would Reduce The Risk Of Suit faced by physicians and hospitals who perform peer review is being sponsored by Rep. Ron Wyden (D, Ore.). If enacted, physicians would be freer to take action when a colleague is practicing substandard or dangerous medicine, Wyden said. The bill would grant limited immunity under federal law to groups and individuals that conduct professional review.

The AMA supports the concept of the portion of the bill that extends immunity to protect the medical profession's peer review activities carried out in the public interest. However, the AMA has reservations about the bill's other principle feature — the proposed establishment by the Dept. of Health and Human Services (HHS) secretary of a national clearinghouse that would gather information on all professional liability settlements or judgments in excess of $35,000 and adverse licensure actions taken by state medcial boards. As it stands, the Wyden bill would authorize HHS to permit a private-sector entity to operate the clearinghouse. Also, before making decisions on whether to grant professional privileges, hospitals would be required — as a condition of Medicare participation — to seek information from the national clearinghouse.

The AMA is not endorsing the bill in its current form, but rather hopes to work with Wyden and others concerning modifications to the bill.

* * *

Medicare Officials Have Released a list of 2,300 hospitals with unusually high or low death or utilization rates. Intended for interpretation by Medicare's peer review organizations (PROs), the lists were released with a number of caveats in response to numerous Freedom of Information Act requests from the press. Federal officials warned against drawing any conclusions about a hospital's quality from the data. The data are not intended to "point a finger at any hospital," said Henry Desmarais, M.D., acting head of the Health Care Financing Administration (HCFA). Hospital representatives condemned the action. Jack Owen, executive vice president of the American Hospital Assn. (AHA) called it the "stupidest thing" HCFA had ever done.

AMA Executive Vice President James H. Sammons, M.D., said: "The AMA agrees strongly with the HCFA that the general public should be cautioned against drawing any conclusions from the hospital release and mortality statistics from the Dept. of Health and Human Services. These data should only be interpreted along with other pertinent information."

In developing the lists, HCFA statisticians looked at 1984 claims data for nearly 11 million Medicare patients. National norms were computed and then adjusted for 90 variables — such as age, sex, and race, along with the types of conditions most frequently treated at the hospital — to predict an overall mortality or discharge rate for each of the more than 6,000 hospitals in the Medicare program. The process was repeated for nine of the diagnosis-related groups (DRGs) Medicare uses to determine hospital payments. In all, 269 hospitals in 46 states were singled out as having abnormal overall mortality rates, with 142 showing higher than average death rates and 127 indicating lower than average rates. Some 263 facilities were identified as having unusual overall discharge rates.

* * *

The AMA's Council On Ethical And Judicial Affairs has clarified its opinion on withholding or withdrawing life-prolonging medical treatment to make it clear that withdrawal of artificial feeding and hydration for permanently comatose patients is not unethical, provided certain safeguards are present. The new opinion says that a physician should consider the prior expressed wishes of the patient and the attitudes of the family or those who have responsibility for the custody of the patient. Even if death is not imminent, but a patient's coma is beyond doubt irreversible, "it is not unethical to discontinue all means of life-prolonging treatment," including artificial feeding and hydration, the new opinion says. The opinion was announced at a conference on medical ethics in New Orleans sponsored by the AMA and the Hastings Center, attended by about 250 physicians.

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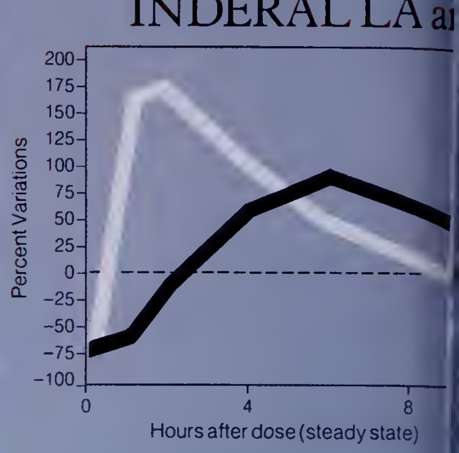

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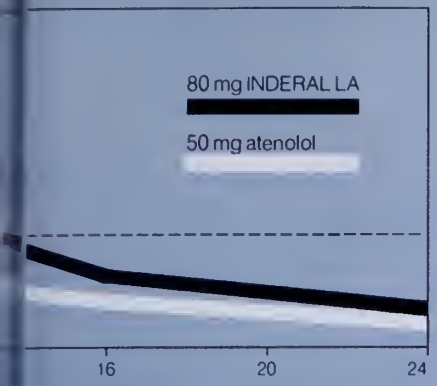

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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors

DIABETES AND HYPOGLYCEMIA Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function Propranolol is not indicated for the treatment of hypertensive emergencies

Beta adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that propranolol may interfere with the glaucoma screening test Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS Patients receiving catecholamine depleting drugs, such as reserpine should be closely observed if propranolol is administered The added catecholamine blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18 month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug induced toxicity There were no drug related tumorigenic effects at any of the dosage levels Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well controlled studies in pregnant women Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

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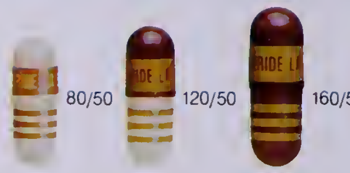

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NURSING MOTHERS. Propranolol is excreted in human milk Caution should be exercised w propranolol is administered to a nursing mother.

PEDIATRIC USE Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL. Periodic determination of serum electrolytes to de possible electrolyte imbalance should be performed at appropriate intervals.

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electro imbalance, namely Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and u electrolyte determinations are particularly important when the patient is vomiting excessive receiving parenteral fluids Medication such as digitalis may also influence serum electroly Warning signs irrespective of cause are. Dryness of mouth, thirst, weakness, lethargy, drowsin restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is presen during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia Hy kalemia can sensitize or exaggerate the response of the heart to the toxic effect of dig (eg, increased ventricular irritability) Hypokalemia may be avoided or treated by use of potass supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, ex under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may o in edematous patients in hot weather; appropriate therapy is water restriction, rather than adm tration of salt, except in rare instances when the hyponatremia is life-threatening. In actual depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thia therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diab mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diu therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland hypercalcemia and hypophosphatemia have been observed in a few patients on prolo thiazide therapy The common complications of hyperparathyroidism, such as renal lithiasis, resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued b carrying out tests for parathyroid function.

DRUG INTERACTIONS Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy pa Thiazides may decrease arterial responsiveness to norepinephrine This diminution is not suff to preclude effectiveness of the pressor agent for therapeutic use.

PREGNANCY Pregnancy Category C. Thiazides cross the placental barrier and appear in blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed ag possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytop and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS Thiazides appear in human milk. If use of the drug is deemed esse the patient should stop nursing.

PEDIATRIC USE Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mil transient and have rarely required the withdrawal of therapy

Cardiovascular Bradycardia, congestive heart failure; intensification of AV block, hypoten paresthesia of hands, thrombocytopenic purpura, arterial insufficiency, usually of the Ray type

Central Nervous System Lightheadedness; mental depression manifested by inso lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, disturbances, hallucinations, an acute reversible syndrome characterized by disorientati time and place; short-term memory loss; emotional lability; slightly clouded sensorium decreased performance on neuropsychometrics

Gastrointestinal. Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, c pation, mesenteric arterial thrombosis, ischemic colitis.

Allergic Pharyngitis and agranulocytosis, erythematous rash, fever combined with achin sore throat, laryngospasm and respiratory distress

Respiratory Bronchospasm.

Hematologic Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpu

Auto-Immune In extremely rare instances, systemic lupus erythematosus has been repor

Miscellaneous Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotenc Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving th serous membranes, and conjunctivae reported for a beta blocker (practolol) have not associated with propranolol.

Hydrochlorothiazide:

Gastrointestinal Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, consti jaundice (intrahepatic cholestatic jaundice), pancreatitis, sialadenitis

Central Nervous System Dizziness, vertigo, paresthesias, headache; xanthopsia

Hematologic. Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol, barbitura narcotics)

Hypersensitivity Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vas cutaneous vasculitis), fever, respiratory distress, including pneumonitis; anaphylactic reac

Other Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness, restles transient blurred vision

Whenever adverse reactions are moderate or severe, thiazide dosage should be redu therapy withdrawn

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THE NEBRASKA MEDICAL JOURNAL

"It Hasn't Hit Nebraska Yet"

IVAN G. ABDOUCH, M.D.
Family Practitioner
F. M. GAWECKI, M.D.
Obstetrician-Gynecologist
Papillion, NE

PHYSICIANS in Massachusetts are refusing to care for pregnant women. They are protesting an increase in malpractice liability premiums. Premiums for high-risk specialists in New York, Florida and California are over $100,000 a year. Many physicians are referring all high-risk patients, discontinuing baby deliveries, or retiring early to avoid the high premium costs. Lawsuits are increasing, awarded judgements are high and even small town physicians are coming under attack. The number of non-meritorious lawsuits is on the rise. In the face of their own increasing malpractice premiums, attorneys are disinterested in the problems of the physician.

In Nebraska, things are not as bad as on the East and West coasts. The legislative unicameral, up until now, has been thoughtful and has shown restraint. The present laws appear to be better than any of the surrounding states. But, "less bad" is not the same as "good". Although, premiums are low in Nebraska, there is continuing pressure of the eventual lawsuit and increasing premium costs.

Many patients are looking at physicians differently today. Physicians are portrayed as interested in treating diseases rather than treating people. They are no longer viewed as a close friend and confidant. Recent complaints are that physicians no longer listen and are unwilling or unable to explain things to patients or families. Most physicians try to be caring, affectionate and considerate people — unfortunately, many patients don't see them that way.

We, as Nebraska physicians, need to talk to our patients and allow them time to have their questions answered. Although this may be time consuming and allow fewer patients to be managed each day, it may be less costly in the long run.

We need to practice defensive medicine to the extent of being thorough in physical examinations and history taking. Documentation of performance and patient discussions must be put into the chart. Notes must be dictated or written shortly after the office visit or operative procedures. Discharge summaries, including prognosis and instructions given to the patient, must be done the day the patient is discharged from the hospital. Relying on memory days later is likely to result in omissions, or worse yet, inaccuracies.

By practicing the "artful" side of medicine — by talking to patients, by listening to patients, and by chart documentation — the number of lawsuits may decrease or perhaps they will be much easier to defend. These basic principles which we were all taught in school may seem simplistic, but can be easily lost in the turbulence. If we do not practice them daily, we leave ourselves open to further attacks.

Each of the 2500 physicians practicing in the state should continue to perform the art of medicine to the best of his/her ability, while our legislators perform for the people of Nebraska. In order for us to concentrate on our individual performance, however, we must be confident that a strong collective effort on our behalf exists. We need assurance that our organizations will assume a more offensive, unified posture to avoid further inappropriate occurrences such as public misinformation, price freezes, DPT scares, pressured removal of useful products from the market, and the like.

We have an opportunity to set an example for other states to follow. It hasn't hit Nebraska, yet it doesn't need to.

ORIGINAL ARTICLES

Endocarditis Caused by Nutritionally-Variant Streptococci: Therapy With Penicillin Combined Initially With Gentamicin

DAVID L. DWORZACK, M.D.*
RICHARD B. CLARK, PH.D.
MARY P. PUGSLEY, M.D.
JAMES F. STANOSHECK, M.D.
MICHAEL M. DEHNING, M.D.
From the Departments of Medicine and Medical Microbiology, Creighton University School of Medicine, Omaha, Nebraska and Immanuel Hospital, Omaha, Nebraska.

AMONG the streptococci associated with infective endocarditis, nutritionally variant streptococci (NVS), also called satelliting, pyridoxal-requiring, vitamin B_6-dependent, vitamin B_6-deficient, or thiol-dependent streptococci, make up a small, but significant percentage.[1] Endocarditis caused by NVS has, on occasion, been difficult to diagnose.[2, 3] These strains require special conditions to support growth not routinely used in many laboratories. They may also have an atypical appearance on gram stain when growing in blood culture bottles. [3]

Several reports have emphasized that patients with endocarditis caused by NVS are at increased risk for complications or relapse.[1,4,5] It has been suggested that relative resistance to the bactericidal action of penicillin may be responsible for this risk.[5,6] The combination of penicillin and an aminoglycoside has been recommended in therapy of all cases of endocarditis caused by NVS.[4] However, prolonged aminoglycoside courses are associated with both toxicity and added expense. We present two cases of endocarditis caused by NVS in which a satisfactory outcome was achieved by the use of penicillin for six weeks combined with gentamicin during only the first portion of the therapy course.

Case Histories

Patient 1 is a 66 year old man who was hospitalized with a history of fever (100 to 101° F), sweats, malaise, and weight loss for approximately six months. A diagnosis of prostatitis was made at the onset of this illness and the patient was treated with trimethoprim/sulfamethoxazole for three months. During this time, his fever was only partially suppressed. During the six weeks prior to admission, the patient developed low back pain, and migratory pain of the shoulders, hips, and knees. There was history of a childhood illness characterized by malaise and joint pain. A heart murmur was diagnosed 43 years prior to admission. Nine months prior to admission, the patient had undergone dental cleaning, without antecedent antibiotic prophylaxis.

Physical examination revealed a left conjunctival hemorrhage and a splinter hemorrhage of the left great toe. A grade 2/6 holosystolic murmur was heard best at the apex and radiated to the left axilla. The remainder of the examination was unremarkable.

Initial laboratory studies included: hemoglobin, 12.6 g/dl; WBC, 10,400/mm^3 with 60% segmented neutrophils, 10% bands, 1% basophils, 14% lymphocytes, 14% monocytes, and 1% atypical lymphocytes; and rheumatoid factor, 1:2560. The following studies were negative or within normal limits: urinalysis, serum and urine protein electrophoresis, creatinine and serum thyroxine. Electrocardiogram revealed left axis deviation. An echocardiogram was interpreted as showing abnormal motion of the posterior mitral valve leaflet with a possible vegetation. Multiple blood cultures drawn at admission grew an alpha-hemolytic, pyridoxal-requiring streptococcus.

Gentamicin 80 mg every 8 hours and benzyl penicillin 3 million units every 4 hours were administered intravenously. Gentamicin blood levels on this dose were 5.6 ug/ml (peak) and 1.4 ug/ml (trough). Tube dilution susceptibility to these antibiotics and serum antibacterial titers are shown in Table 1. The patient was given 42 days of parenteral antibiotic therapy. Repeat blood cultures during antibiotic therapy were sterile. Gentamicin was stopped on day 17 of therapy because of an increase in serum creatinine to 1.7 mg/dl. His course was otherwise uncomplicated except for an episode of idiopathic unilateral parotitis which occurred during the fourth week of therapy, and resolved with symptomatic care. The patient remains well nine months after completion of therapy. An echocardiogram at the conclusion of his antibiotic course revealed a thickened posterior mitral valve leaflet.

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*Reprint requests: David L. Dworzack, M.D., Department of Medicine, Creighton University School of Medicine, Omaha, Nebraska, 68178.

Patient 2 is a 40 year old male who was hospitalized with a four week history of nausea, nonproductive cough, and chest pain described as constant, nonexertional, and exacerbated by cough. He also had a 20 pound weight loss, and had experienced chills during the two weeks prior to admission. He was hospitalized for an episode of chest pain 11 months earlier. Evaluation at that time included a normal graded exercise tolerance test and an echocardiogram which revealed a probable bicuspid aortic valve. There was no history of recent dental work, gastrointestinal or genitourinary procedures.

On admission, his temperature was 101° F. There were a few splinter hemorrhages of his nail beds. A grade 2/6 harsh systolic murmur was present and radiated to the carotids. The remainder of the examination was normal. Initial laboratory values included: hemoglobin 10.7 g/dl; WBC 4,400/mm ^{3} with 70% segmented neutrophils, 8% bands, 1% eosinophils, 2% lymphocytes, 8% monocytes, and 11% atypical lymphocytes; and a normal urinalysis. An electrocardiogram showed first degree atrio-ventricular block and T-wave inversion in the anterior leads. Neither of these findings had been present on the electrocardiogram done 11 months earlier.

The patient was evaluated for the possibility of myocardial infarction. On day 3 he developed pain and parethesia in his right leg which was found to be cold and pulseless. An embolectomy of the superficial and deep femoral arteries was performed. Also on that day, blood cultures drawn on admission were reported to show growth of an alpha hemolytic, pyridoxal-requiring streptococcus. Echocardiography revealed a bicuspid aortic valve, a dense echo pattern on the noncoronary cusp consistent with vegetation, and mitral annular calcification. Gentamicin 150 mg every 8 hours and benzyl penicillin 4 million units every 4 hours were given intravenously. Gentamicin blood levels on this dose were 5.7 μg/ml (peak) and 1.4 μ g/ml (trough). He was afebrile after 2 days of therapy and remained so during his hospitalization. A grade 2/6 diastolic murmur of aortic insufficiency was heard on day 5 which decreased in intensity during the remainder of his hospitalization. Tube dilution susceptibilities to penicillin and gentamicin as well as serum antibacterial titers are shown in Table 1. The patient was given a total of six weeks of antibiotic therapy. The final four weeks consisted of benzyl penicillin (4 million units every 4 hours) alone which was intravenously self-administered at home. Repeat blood cultures during combined penicillin/gentamicin therapy were sterile. On followup examination revealed a grade 2/6 diastolic murmur of aortic insufficiency without signs of heart failure. He remains asymptomatic 4 months after the end of antibiotic therapy.

Methods

The penicillin and gentamicin minimal inhibitory concentrations (MIC) of the NVS isolates were determined by a macrodilution method in Todd-Hewitt broth (THB) supplemented with 10 μg/ml of pyridoxal hydrochloride. Broth from tubes without visible growth (0.01 ml) was subcultured on pyridoxal supplemented (10 μg/ml) sheep blood agar (SBA) to determine the minimal bactericidal concentration (MBC) for both antibiotics. Serum inhibitory and bacteriocidal titers (Schlichter test) were performed by a standard method,[5] utilizing pyridoxal-supplemented THB as the diluent. Broth from all tubes without visible turbidity (0.01 ml) was subcultured on sheep blood agar with added pyridoxal hydrochloride to assess 99% killing.

Results

Both NVS isolates failed to grow either aerobically or anaerobically on SBA after subculture from the blood culture bottles. Successful subculture was achieved after cross streaking the inoculum with **Staphylococcus aureus**. The two strains grew as small alpha-hemolytic satellite colonies around the cross streak. The pyridoxal supplemented SBA and THB supported good growth of both isolates whereas no growth was observed in unsupplemented media.

The MIC and MBC of penicillin and gentamicin are shown for both isolates in Table 1. Isolate 1 appeared to be tolerant to penicillin. Both isolates were only moderately susceptible to gentamicin. Peak and trough serum inhibitory and bactericidal titers in both patients were ≥1:16 during combined penicillin/gentamicin therapy and when penicillin was used alone (Table 1).

Discussion

Endocarditis caused by NVS has been extensively documented in both adults and children.[1-9] These bacteria have been the cause of 5-6% of all cases of streptococcal endocarditis in one large series. [1] In some instances, these organisms may be missed in blood cultures since not all media are equivalent in supporting their growth. Only thiol broth supports the growth of NVS without supplementation, whereas brain heart infusion broth and Columbia broth require 5% human blood for optimal growth. [10] Minimal growth was observed in trypticase soy broth even with added human blood. The BACTEC blood cultures which were used in this study support maximal growth of NVS strains since they are supplemented with 0.001% pyridoxal (aerobic bottles) and 0.05% cysteine (anaerobic bottles). [10] Even with appropriate media and supplements, NVS growth is slower when compared with other streptococcal strains; therefore, longer incubation periods may be required before growth is apparent. [2] After detection in blood cultures, the NVS isolates must be subcultured immediately to media containing the appropriate supplements (pyridoxal, pyridoxamine or cysteine) or to blood agar cross-streaked with **S. aureus**.[7] Failure to subculture within 2 to 4 days may result in loss of viability.

NVS may develop bizzare morphologies in blood culture bottles, even to the extent of being misidentified as fungi.[3] All of these characteristics can hamper the detection of endocarditis caused by these bacteria. As a result, NVS have frequently been listed among the causes of "culture-negative" endocarditis.[2, 8, 11]

It has been the impression that patients with this type of endocarditis have a poorer clinical outcome than those with infections caused by nutritionally normal viridans streptococci. In a series of six patients reported by Roberts et al, only two had uncomplicated clinical courses. [1] Two patients died and two had a relapse. Other reports have also stressed the frequency of relapse. [4, 5] It has been suggested that an important reason for relapse in NVS endocarditis is resistance to the bacteriocidal action

TABLE I

		Isolate 1	Isolate 2
MIC/MBC (μ g/ml)			
Penicillin		0.03/4.0	0.012/0.012
Gentamicin		4.0/4.0	8.0/8.0
Serum Antibacterial Titers (inhibitory/cidal)			
Penicillin and Gentamicin			
	trough	≥1:128/≥1:128	1:16/1:16
	peak	≥1:128/≥1:128	≥1:128/≥1:128
Penicillin alone			
	trough	≥1:128/≥1:128	1:128/1:128
	peak	≥1:128/≥1:128	≥1:128/≥1:128

of penicillin. Although the majority of isolates of NVS are inhibited by low concentrations of penicillin, some strains (including one of ours) demonstrate tolerance in that concentrations many fold higher are required to kill the bacteria (MBC/MIC$\geq$32). Studies examining the susceptibility of NVS to penicillin have shown varying results. While Gephart and Washington [12] concluded that NVS were as susceptible to penicillin as other viridans streptococci, Holloway and Dankert [13] demonstrated tolerance to penicillin in all of the 11 strains that they tested. This discrepancy may be explained by the different techniques used to measure susceptibility.

Because of the risk of relapse, Carey, et al recommended that patients with endocarditis caused by NVS should be treated with both penicillin and an aminoglycoside when the isolate appears resistant to penicillin. [5] Recently, it has been suggested that all cases of endocarditis caused by NVS may require such therapy, regardless of the results of **in vitro** penicillin susceptibility tests. [4] However, the optimal duration of antibiotic therapy, as well as the choice of aminoglycoside and duration of this portion of the therapy course, remain in question.

Our patients had clinical courses that were much more benign than suggested by the literature. Serum inhibitory and bacteriocidal titers indicated satisfactory antibiotic activity both during combination penicillin/gentamicin therapy and after the gentamicin was discontinued. Both patients have continued to do well, with no evidence of relapse. Although the contribution of the aminoglycoside to their apparent cure cannot be ascertained, their cases suggest that an aminoglycoside need not be continued for the full duration of therapy in endocarditis caused by these bacteria.

Summary

Nutritionally-variant streptococci (NVS) causing infective endocarditis may be difficult to detect because their growth requirements are not met by unsupplemented media. Because of the risk of relapse, patients are usually treated with both penicillin and an aminoglycoside, although the optimal duration of aminoglycoside therapy remains uncertain. We successfully treated two patients with endocarditis caused by NVS with penicillin for 6 weeks combined initially with gentamicin for 17 and 14 days, respectively. Although one of the NVS isolates appeared tolerant to penicillin, therapeutic serum bactericidal titers were easily maintained in both patients on penicillin alone. Our experience suggests that aminoglycosides need not be used for the full duration of antibiotic therapy.

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Neonatal Sepsis: Emergence of *Haemophilus Influenzae* in a Level III Nursery

LYNNE D. WILLETT, M.D.
ROBERT M. NELSON, M.D.
Division of Neonatology, Univeristy of Nebraska Medical Center, Omaha, Nebraska

NEONATAL bacterial sepsis is a constant concern for those physicians involved in newborn care. The incidence of neonatal sepsis is estimated at 1-4/1000 newborns and is associated with obstetrical complications, prematurity, and influenced by the common infectious flora of individual nurseries.[1] In the last 30 years, several organisms have at various times been the predominant pathogen of neonatal sepsis. In 1930-50, *Group A Beta-hemolytic streptococci* predominated followed by *Staphylococcus aureus* and coliforms in the 1950's and 60's. In the last decade, *Group B streptococcus* has emerged as the leading cause of newborn sepsis although many bacteria can cause infection in infants. As a tertiary referral center for newborn intensive care, we have noted a disturbing trend in the etiology of neonatal sepsis. This report focuses on the emergence of *Haemophilus influenzae* as a principal cause of neonatal sepsis in our nursery and case reports of similar experience in Nebraska.

Material and Methods

We reviewed all admissions to the Neonatal Intensive Care Unit of the University of Nebraska Medical Center (UNMC) for the period of time from January 1981 to July 1985 for cases of neonatal sepsis. During this 54 month period, approximately 2000 infants were admitted to the NICU. Sepsis was defined as infants with positive blood cultures <30 days of postnatal age. Infants were excluded if: 1) they were presumed septic clinically but failed to have positive blood cultures, 2) they had positive cutaneous or gastric cultures but negative blood cultures, 3) they developed positive blood cultures during their stay in the Neonatal Intensive Care Unit (NICU) subsequent to indwelling catheter placement but initially had negative blood cultures. Anecdotally, 3 other cases of neonatal *Haemophilus influenzae* sepsis were found in Nebraska. All available records were reviewed by the authors.

Results

Thirteen infants met the criteria for neonatal sepsis at UNMC over the 54 months surveyed. Five of these infants were female and eight were male. Nine of thirteen (69%) were born prematurely. With the exception of one infant diagnosed at 5 days of age (#2), all infants presented with symptoms in the immediate post-partum period and had positive blood cultures within 48 hours.

The etiology of sepsis was almost equally divided between *Group B streptococcus, Haemophilus influenzae,* and *E. coli.* Other organisms included *Streptococcus mutans,* and *Listeria monocytogenes.* In addition to the University cases described, three reports of neonatal sepsis secondary to *Haemophilus* were submitted from outside the Omaha area. They are included here to emphasize the unusual nature and regional concern for *Haemophilus* emergence. Clinical features of all infants are summarized in Table I. Table II lists the predominant pathogens for the NICU at University of Nebraska Medical Center.

Only two of thirteen mothers (15%) had ruptured amniotic membranes over 24 hours. In addition, infection was suspected clinically in only eight of fourteen cases based on maternal symptoms of fever, elevated white count, positive maternal cultures, or uterine tenderness. In all three cases of *Haemophilus influenzae* neonatal sepsis recorded by pediatricians outside of Omaha, the infants were preterm, membranes had not been ruptured

TABLE I
Clinical features of 16 cases of neonatal sepsis.

	SEX	GA	YEAR	ORGANISM	ISOLATION SITE	OUTCOME	LENGTH OF RUPTURED MEMBRANES	ANTIBIOTICS
1	F	40	1984	Group B Strep	Blood	Survived/Nl	Delivery	Ampicillin Gentamicin
2	M	36	1985	E. Coli	Blood, CSF	Survived/Abnl	Delivery	Cefotaxime Gentamicin
3	F	39	1985	E. Coli	Blood, CSF	Survived/Abnl	8 hours	Ampicillin Gentamicin
4	M	40	1984	H. Flu type C	Blood	Survived/Nl	2 hours	Ampicillin
5	M	24	1983	H. Flu	Blood *	Died <24 hours	20 hours	--------
6	M	40	1983	Strep mutans	Blood	Survived/Nl	25 hours	Ampicillin
7	F	28	1982	H. Flu / Pseudomonas	Blood, Lung	Died at 28 days	11 hours	Ampicillin Gentamicin
8	F	32	1983	E. Coli	Blood, Urine	Died at 6 wks	?	Ampicillin Methicillin Gentamicin
9	M	30	1983	H. Flu	Blood *	Died <24 hours	Delivery	Ampicillin Kanamycin
10	M	34	1981	Group B Strep	Blood *	Died <24 hours	3 hours	Ampicillin Penicillin Gentamicin
11	M	27	1982	Group B Strep	Blood *	Died <24 hours	>5 hours	Penicillin Gentamicin
12	F	36	1982	Group B Strep	Blood	Died <24 hours	48-72 hours	Ampicillin Gentamicin
13	M	35	1985	Listeria	Blood	Survived/Nl	Delivery	Ampicillin
14t	F	34	1984	H. Flu	Blood	Survived/Nl	Delivery	Ampicillin
15t	F	34	1984	H. Flu	Blood	Survived/Nl	Delivery	Ampicillin
16t	M	28	1983	H. Flu	Blood *	Died <24 hours	12 hours	Ampicillin

* No CSF obtained
t Cases not from UNMC

TABLE II
Etiologic agents of neonatal sepsis at UNMC.

Group B Beta-hemolytic streptococcus	31%
Haemophilus influenzae	31%
Escherichia coli	23%
Other	15%

over 24 hours, and no maternal symptomatology was present.

The mortality rate for infants at UNMC was 54%, the vast majority succumbing to overwhelming infection and complications of prematurity in less than 24 hours. Interestingly, infants #7 and #11 were brothers who both died at less than one day of age from different infections approximately nine months apart. Maternal cultures had been followed between pregnancies and were positive for gonorrhea and *Group B streptococcus*. Two of six survivors are known to have neurologic sequelae related to *E. Coli* meningitis. Although *Haemophilus* infections occurred throughout the 54 month period, five of seven cases were in 1983 and 1984. Thus far in 1985, we have not identified any case of neonatal sepsis due to *Haemophilus influenzae*. Luckily, in all cases of *Haemophilus* sepsis, the organism was sensitive to ampicillin.

Discussion

Prior to 1975 less than 10 cases of neonatal sepsis due to *Haemophilus influenzae* were reported in the literature.[2-11] Since 1975, 5 further cases have been noted in separate reports across the country.[12-14] For Nebraska alone to have seven cases of neonatal sepsis due to *Haemophilus influenzae* is a disturbing trend. Several theories to explain this phenomenon can be postulated.

First, the levels of maternal antibody to *Haemophilus influenzae* may be decreasing. In 1971, Schneerson **et al** found cord levels of antibody to be quite high, however, no recent information is available.[15] We did not look at maternal antibody in any of our infants.

Secondly, the carriage rate of *Haemophilus influenzae* in the female genital tract may be increasing, particularly in this geographic region. Most authors estimate female carriage rates of approximately 1% for this bacteria.[11, 13] In two of the four University cases, the maternal cervix was cultured and found to be harboring the organism.

Thirdly, we may be looking for and diagnosing sepsis more efficiently. Development of rapid diagnostic techniques such as counterimmunoelectrophoresis (CIE) and latex agglutination for *Haemophilus influenzae* make this a possibility. Certainly a high clinical index of suspicion in cases of premature labor, prolonged ruptured membranes, and suggestion of maternal infection is warranted. Nevertheless, the morbidity and mortality for *Haemophilus influenzae* in this age group remains extremely high.

Lastly, neonatal sepsis secondary to *Haemophilus* may be increasing in frequency based on increased virulence of the organism. This is speculative, however, and remains to be shown.

On the basis of these data, we would continue to recommend early institution of intravenous ampicillin and gentamicin as the drugs of choice for suspected neonatal sepsis until culture results are available. The possibility of beta lactamase positive *Haemophilus influenzae* must always be considered, especially in metropolitan areas where approximately 20% or more of *Haemophilus influenzae* are resistant to ampicillin.[19] To date, none of our cases have been resistant. If further coverage is desired, several alternatives are possible. The third generation cephalosporins, moxalactam, cefatriaxone and cefotaxime appear to adequately treat *Haemophilus influenzae* and reach high cerebrospinal fluid (CSF) levels. Ceftriaxone may be a particularly good choice since side effects of bleeding are less, CSF levels are higher and twice daily dosing is possible.[20] Together with ampicillin, ceftriaxone provides broad spectrum coverage, especialy for other gram negative organisms with the possible exception of Pseudomonas. However, their use in neonates is not extensive and they should be used with caution. Chloramphenicol is an alternative, although a not very desirable one due to extreme toxicity (Gray Baby Syndrome) at high serum concentrations in this age group. This drug should not be used in newborns unless a safer alternative is unavailable. Serum levels of chloramphenicol must be readily obtainable and results reported within several hours allowing for rapid adjustment of doseage.

Finally, these infants should have full supportive care available to monitor cardiovascular, respiratory and neurologic status as they can become extremely ill in a matter of hours. Intravenous antibiotic therapy should be continued for a minimum of 10 days. Longer durations of therapy may be indicated in cases complicated by septic arthritis, osteomyelitis, therapeutic failure, etc. A high index of suspicion should always be maintained for distant foci of infection, a not uncommon occurrance in *Haemophilus* infections of any age group.

Current investigation shows promise through improved therapy and prevention in the future. White cell transfusion, vaccines, IV gamma globulin, monoclonal antibody therapy, newer antibiotics, faster diagnostic techniques, and development of better drugs for the support of septic shock may improve outcome as they became available.

Lastly, we would urge all clinicians involved in pediatric care to vaccinate children at 24 months of age for *Haemophilus influenzae*. The currently available vaccine marketed by Mead Johnson Nutritional Division is recommended and approved by the American Academy of Pediatrics.[20, 21] Hopefully, this will provide a positive impact on carriage and transmission rates as well as increased antibody levels in females when they reach childbearing age although this remains to be investigated.

Addendum: At the time of this publication, Drs. Shaffer, Gasseling, and Keifer in Kearney, Nebraska, reported a fatal case of neonatal β-lactamase positive *H. influenzae* sepsis in a premature newborn. To our knowledge, this is the first case of neonatal sepsis due to a β-lactamase positive *H. influenzae* in Nebraska.

Acknowledgements:

The authors thank Dr. L. J. Marshall for providing a case presented and Sara Wilke for manuscript preparation.

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Atypical, Cutaneous Fibrous Histiocytoma with Early Metastasis

MARTHA A. AROUNI, M.D.
CHHANDA BEWTRA, M.D.*
Department of Pathology
WILLIAM A. ALBANO, M.D., F.A.C.S.
Department of Surgical Oncology
JOEL N. BLEICHER, M.D., F.A.C.S.
Department of Surgery
Creighton University School of Medicine, Omaha, Nebraska

MALIGNANT fibrous histiocytoma may show different histological patterns, O'Brien and Stout first defined the tumor in 1964 as arising from histiocytes, with a storiform growth pattern.[3] The present definition calls for histiocytes and fibroblasts in a storiform growth pattern, often with inflammatory cells, anaplastic stromal cells, and bizarre giant cells.[2, 4, 5] Kempson and Kyriakos, in their study of thirty cases of 'fibroxanthosarcoma,' were unable to find a single reliable criterion for predicting their future behavior.[6] Numerous attempts have been made to subclassify the malignant fibrous histiocytomas in order to describe them and predict their future behavior.[4, 5, 6, 7] However, this has yielded no significant difference in prognosis among subtypes.[5] There are also numerous theories concerning the histogenesis of this tumor.[2, 3, 8] Undoubtedly, this heterogeneous group of tumors is a controversial issue among pathologists.

We present here a case of malignant fibrous histiocytoma which started as a small, superficial, cutaneous, benign fibrous histiocytoma with only minimal nuclear atypia. Benign fibrous histiocytoma is a common skin lesion which is differentiated from its malignant counterpart by the presence of well-differentiated cells with only minimal pleomorphism or mitoses.[9] This lesion recurred in the same location three times within one year, and in spite of wide local excision and irradiation, metastasized to the lymph nodes and lungs within 18 months.

Case Report

A 43-year-old caucasian male presented with a less than 1 cm. papule on the dorsum of his left foot. The lesion was treated with local excision and was noted to extend to the margins. The tumor was located entirely within deep dermis and subcutaneous tissue, with no involvement of deep fascia or muscle. The tumor demonstrated a prominent storiform pattern and an occasional mitosis. (fig. 1-2/10 HPF.) No necrosis was present. Only minimal cellular atypia was present. The lesion was diagnosed as "fibrous histiocytoma," which was confined upon consultation. Local recurrence developed within six months and was again treated with incomplete excision. The histology was unchanged but the lesion demonstrated focal necrosis (fig. 2a). The same pathologists made the diagnosis of "atypical fibrous histiocytoma" on this recurrence. The patient noted a third recurrence four months later and sought consultation. Wide local excision with skin graft was performed. The diagnosis by the same pathologists was made as "atypical fibrous histiocytoma with borderline malignant potential." The tumor histologically appeared as before (fig. 2b), with focal necrosis, and was located entirely within the subcutis with wide margins of excision. There was no increase in the number of mitoses, with only an occasional figure noted after long search. Radiation therapy consultation at that time recommended that the patient receive post-operative radiotherapy. Subsequently he received 6400 rads to the affected foot.

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*For reprint requests, send to: Chhanda Bewtra, M.D., Creighton University, School of Medicine, 601 North 30th Street, Omaha, Nebraska 68131

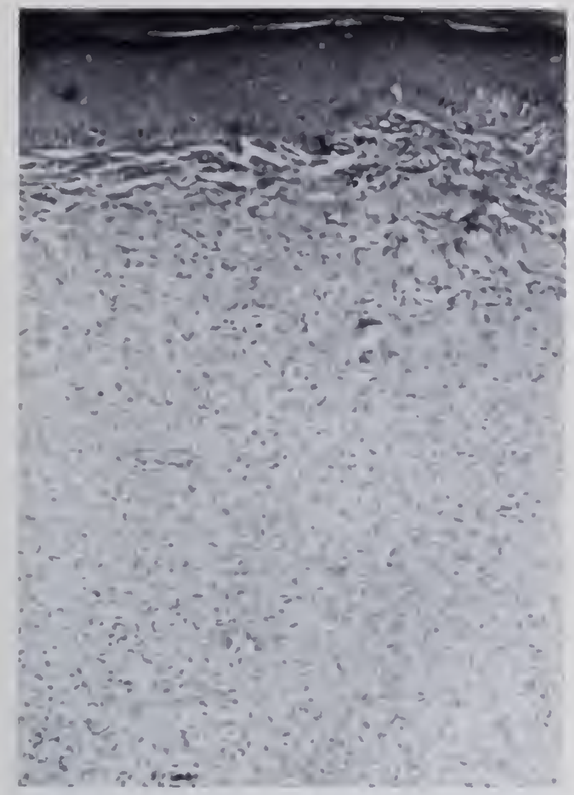

Figure 1a — Tumor at the time of the first biopsy. Tumor located in the deep dermis. 100X/H&E.

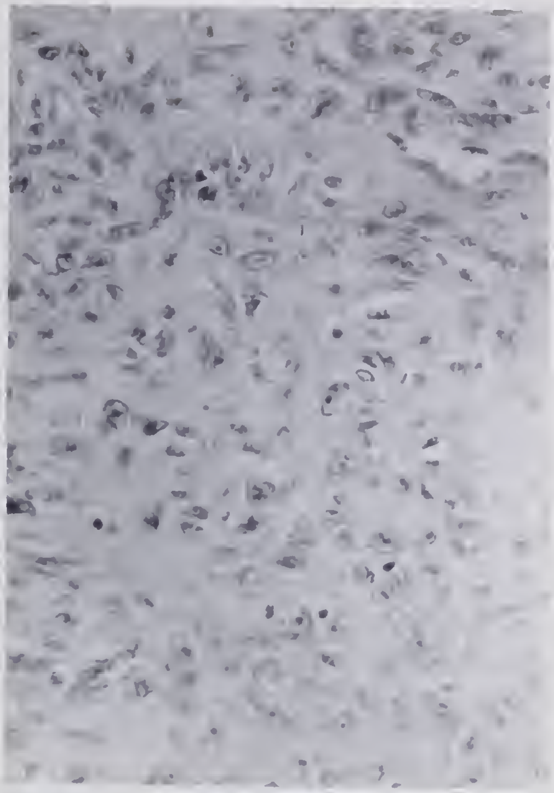

Figure 1b — Tumor at the time of the first biopsy. Uniform cellelarity with storiform pattern. 250X/ H & E.

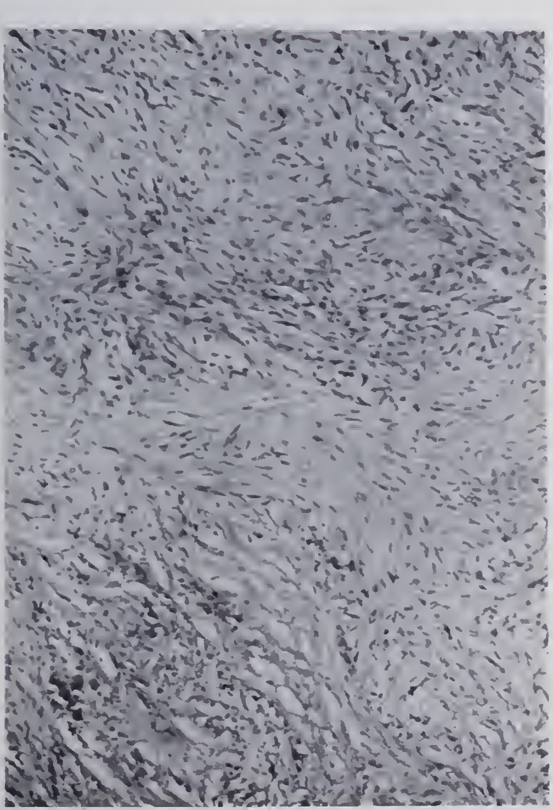

Figure 2a — Second Skin excision, six months later. 100X/H&E. Mineral necrosis present in upper right corner.

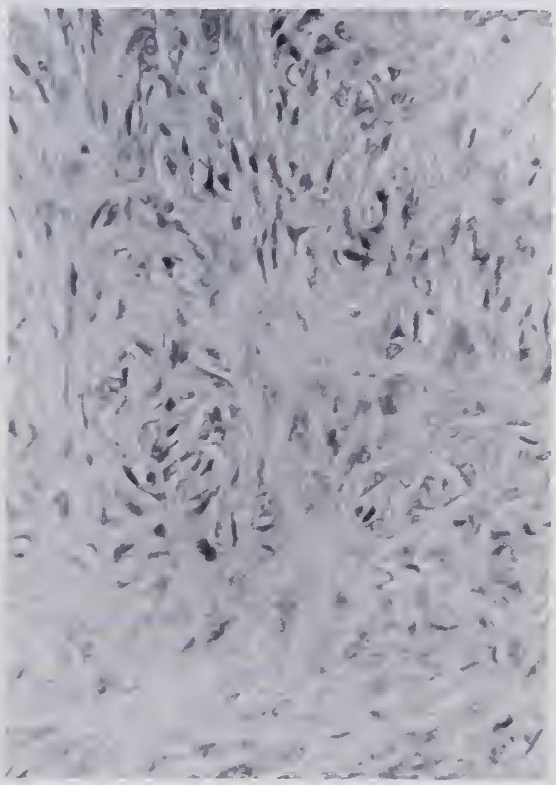

Figure 2b — Third excision, four months later, with storiform pattern and cellularity similar to first biopsy. 250X/H&E

Seven months later, the tumor recurred as a hard, raised, 1 cm. nodule with multiple satellite nodules in the ankle and medial upper thigh. CT scan demonstrated a lung nodule in the lower right lobe. The patient was treated with five days of adriamycin via a left femoral artery catheter. Radical surgery, including a BK-amputation, en bloc resection of the left thigh, superficial lymphadenectomy, and right thoractomy with wedge resection of a single pulmonary metastasis, was performed. The histology of these metastatic tumors appeared the same as the skin nodules (fig. 3a, b). The cutaneous tumor this time demonstrated increased pleomorphism; however, mitoses were still rare and necrosis was focal and microscopic. Tumor size was approximately 1 cm., with pushing, rounded margins, limited to subcutaneous tissue only, with no involvement of deep fascia or muscles (fig. 4a, b). The patient had an excellent postoperative course and is presently receiving combination (cytoxan, adriamycin, oncovin, DTIC) chemotherapy. The patient has since expired.

Discussion

In this case, our patient's initial lesion met all criteria for a favorable benign fibrous histiocytoma, and was not expected to recur, as it was less than 1 cm. in size, was located within the dermis and subcutis, and showed only minimal pleomorphism and mitoses. Less than 10% of such "benign" fibrous histiocytomas are locally aggressive.[9] Our patient's eventual diagnosis of malignant fibrous histiocytoma was only made on observation of the clinical behavior; histologically, its appearance was "atypical" or "borderline low-grade malignant." Yet, this tumor rapidly recurred and distant metastasis took place within eighteen months after first diagnosis.

Clinically, the malignant fibrous histiocytoma is most common in white males over age 40.[3, 6, 7] The lower extremities are the most common sites,[1, 4, 6, 9, 10] and it usually presents as a painless, enlarging mass,[1, 4] as it did in our case. However, malignant lesions are usually multilobulated and greater than 5 cm. in diameter,[2, 4, 10] with less than 10% confined to the subcutis.[9] Weiss and Enzinger found that the metastatic rate increased in proportion to the size of the initial tumor, and that superficial location improves prognosis, with only 9% metastasizing.[4]

The malignant form of this tumor is locally aggressive, with a recurrence rate of at least 44%.[1, 4] It is expected that 42% of the malignant tumors will metastasize, both lymphatically and hemotogenously, to regional lymph nodes and the lungs.[4] Overall, five year survival is approximately 50%.[1, 2, 11]

Cellular atypia, mitosis, tumor necrosis, size and location (superficial versus deep) are the most important pathologic criteria for predicting a malignant course.

Three important facts emerge from this case. First, lesions should be resected completely on initial presentation irrespective of histological appearance which may be deceptively benign. Incomplete resection virtually guarantees recurrence. Second, as the tumor recurs, it grows more "malignant" in its histologic appearance. These changes may be very subtle. Our case demonstrated slight increase in the number of mitotic figures and microscopic foci of tumor necrosis. Third, "necrosis" is an important histologic criterion for predicting future malignant behavior. In our case, recurrences demonstrated focal necrosis, although other histological features were consistent with a benign lesion. Thus, presence of necrosis in benign or atypical type fibrous histiocytomas should warn the physician of rapidly progressive behavior even though lack of significant pleomorphism or mitosis, small size, and superficial location point towards the more benign course.

Summary

The case presented here shows that perhaps diagnostic criteria for predicting the future behavior of these tumors needs to be re-evaluated with a **greater emphasis placed on cellular atypia and tumor necrosis than size and location** of the tumor. This case, with its initial benign histologic presentation, followed an unexpectedly malignant course, will hopefully improve the understanding of this malignancy and will aid physicians in earlier and more effective treatment.

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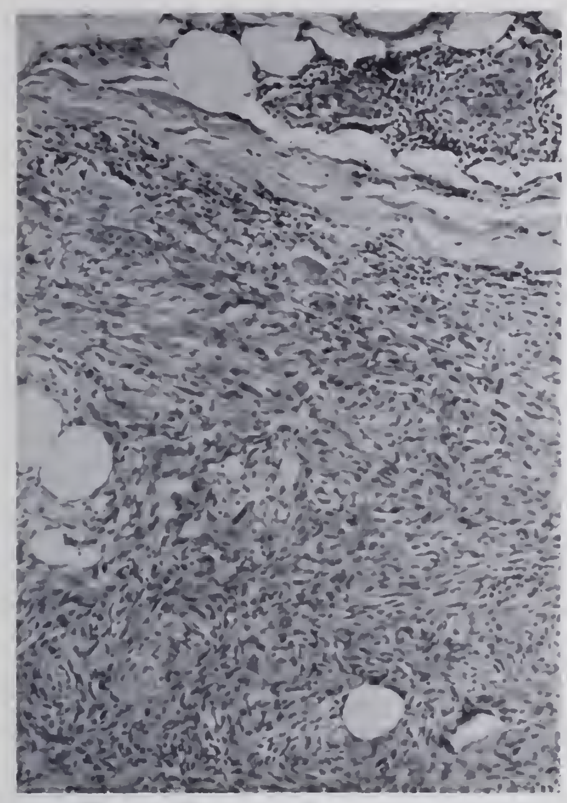

Figure 3a — Metastatic tumor in popliteal lymph node. 100X/H&E

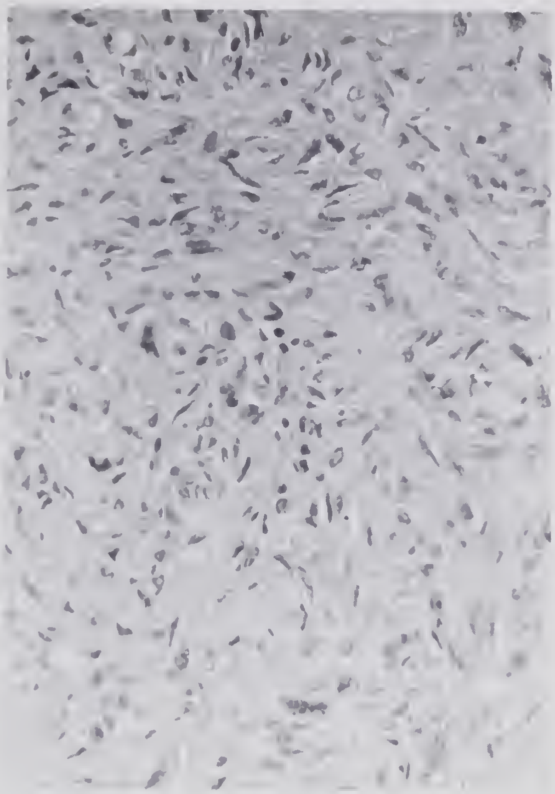

Figure 3b — Small metastatic focus in the lung. 100X/H&E

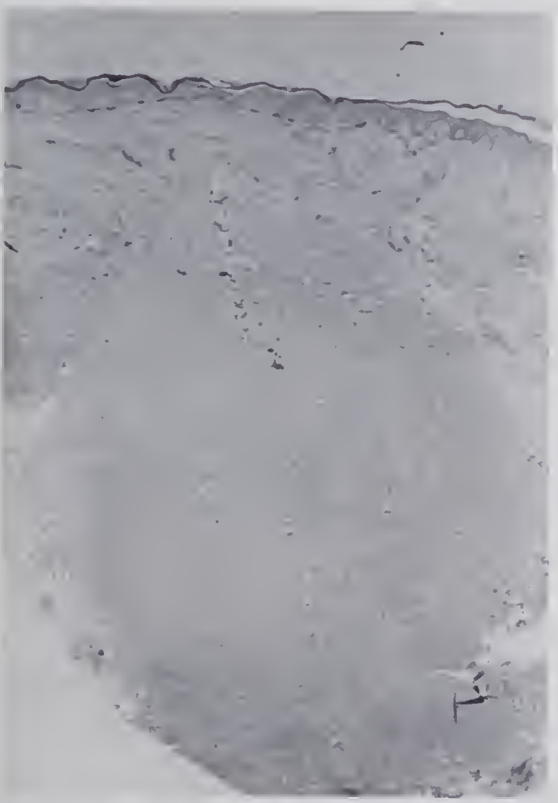

Figure 4a — Skin tumor in the amputated limb demonstrating small size, pushing margins, and extension through subcutis only. 10X/H&E

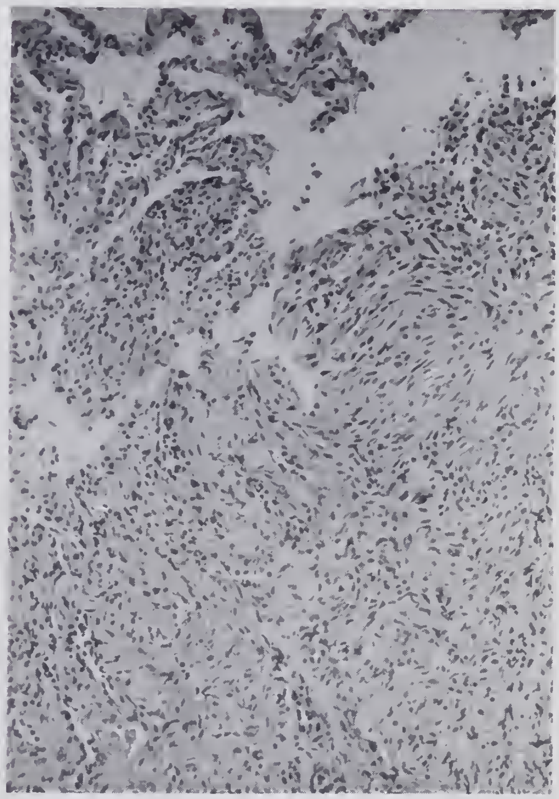

Figure 4b — Same tumor showing increased nuclear atypia as compared to the first biopsy. 250X/H&E

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PERINATAL PAGE

Neonatal Tetanus

DR. GILLES MONIF
Professor of OB/Gyn, Creighton University

BY virtue of disruption of the umbilical circulation and the resultant closure of the vessels, the umbilical cord begins a process of aseptic necrosis. For a period until mummification occurs, the umbilical stump is an open wound and a potential portal for infection. If infection occurs, all too often there is little or no local evidence of inflammation owing to the absence of vascularity. The classical signs of the inflammatory response do not develop; hence, the presence of a purulent exudate or gas in the tissue tends to be the exception rather than the rule.

Infection may prevent effective obliteration of the vessels, consequently bleeding may be an indication of bacterial infection.

Dissemination of infection will occur either through Wharton's jelly or through the vascular channels. Dissemination takes three forms: 1) septicemia, 2) exotoxin-mediated disease, 3) septic emboli with metastatic involvement of the lungs, pancreas, kidney and skin. These metastatic emboli may arise from both arteries and veins since closure of the ductus venosus and separation of the portal circulation from the inferior vena cava does not occur until the 15th to 30th day of life.

Bacteriologically, the major organisms involved are:

1) the beta hemolytic streptococci, groups A, C, and G
2) **Staphylococcus aureus**
3) **Pseudomonas aeruginosa**
4) clostridia infection:
   a) **Clostridium perfringens**
   b) **Clostridium tetani**

Clostridium Tetani

Clostridium tetani is virtually ubiquitously present in the environment. Approximately 20-47% of our soil samples and 30% of animal feces samples will harbor the organism. While there are multiple strains of **Clostridium tetani**, all possess a common heat-stable antigen and consequently are neutralized by a single antitoxin.

Disease due to **Clostridium tetani** is a classic example of an exotoxin-mediated phenomenon and is due to a highly potent neurotoxin (which is a simple protein with a molecular weight of 67,000). It is highly toxic owing to the avidity with which it fixes to the gray matter in the central nervous system. The toxin acts to diminish or abolish synaptic inhibition. While oxygen-labile bacterial hemolysins (which are necrotizing and cardiotoxic) are elaborated, they appear to play a relatively minor role in the production of the disease.

Exotoxin is not released by the bacteria during the logarithmic phase of growth, and is not released into the environment until cell lysis occurs during the stationary phase. Consequently, the onset of symptoms occurs somewhere between 4-5 days after birth. While there is delay between parturition and onset of disease, the mean time of hospitalization is 6.3 days postpartum owing to the rapid progression of disease once toxin release has occurred.

Characteristically, the neonate begins to suck poorly and exhibits hypertonicity and generalized spasms. The latter are characterized by flexion spasms evoked by nonspecific stimuli. Characteristic is persistent flexion of the toes and generalized facial rigidity. If the child is febrile, this should alert the physician to the probability that a mixed infection is present.

Treatment

There are four cardinal points of therapy: 1) antibiotics, 2) neuromuscular blockade or its equivalent, 3) positive pressure ventilation, and 4) antitoxin neutralization:

1) The child is to be started on ampicillin 150 mg/kg per day or penicillin. The goal of therapy is to eradicate the organism and to prevent further toxin

elaboration. Ironically, initially antibiotic therapy is destined to result in a bolus release of toxin.

2) The abolishment of synaptic inhibition can be overcome when a combination of diazepam and chlorpromazine is utilized.
3) One of the important advances has been the utilization of positive pressure ventilation.
4) Anti-tetanus immune globulin should be given. The major question in therapy is whether or not to give it by the intravenous route or intravenous and intrathecal.

The current recommendation is the administration of 500 I.U. of tetanus immune globulin (TIG) intravenously or 250 intravenously and 250 intrathecally. Important: once antitetanus antibodies have been given, true immunity will not develop from the **Clostridium tetani** infection. It is important to begin primary tetanus immunization 4-6 weeks after the administration of TIG.

Prevention

You do not want to treat disease. Tetanus occurs in infants born in conditions:

1) where infection is likely to occur, and
2) where mothers have not been adequately immunized.

The ability of tetanus toxoid immunization to abort the disease has been documented in double-blind randomized tests done in Third World countries. Immune, pregnant women confer protection of their infants through transplacental maternal antibodies.

It is imperative as part of a good prenatal workup to document when last tetanus immunization occurred. If greater than ten years have elapsed since the initial immunization, reimmunization after organogenesis (greater than the 22nd week) should be implemented. This is becoming more and more important as socioeconomical pressures are forcing more individuals to look at the possibility of home delivery or parturition outside of the hospital environment. Institutions concerned with the training of future physicians in dealing with primarily low-income populations must have this as an inherent part of their health care program.

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BRIEF COMMUNICATION

A Spinal Cord Injury Prevention Program

PEG PIERSON, MSN, R.N.
ERIC PIERSON, M.D.
BENJAMIN GELBER, M.D.
221 South 17th Street
Lincoln, NE 68502

"FEET FIRST FIRST TIME" is a spinal cord injury prevention program started in Florida in 1980. The logo is a graphic character jumping feet first to emphasize the message: "Even if you are certain it's safe to dive, jump in FEET FIRST FIRST TIME". The program is targeted at teens and young adults, who account for most of the over 1,000 annual spinal cord injuries due to diving accidents in the US. In some areas of Florida the incidence of spinal cord injuries has decreased by as much as 50% since the program began.

This year in Lincoln, bright yellow T-shirts with the logo will be given to public pool employees. A ten minute film on spinal cord injury causes and prevention will be offered to the schools. These are recommended mechanisms for disseminating the information to the at risk population. Senator Shirley Marsh of Lincoln is introducing a Proclamation for approval by the Legislature and Governor to declare April, Spinal Cord Injury Prevention Month, as has been done in Florida and a few other states.

For additional information and start-up materials, contact Feet First First Time, Inc., at West Florida Regional Medical Center, 8383 Davis Highway, Pensacola, Florida 32514; Ph. (904) 478-4460, ext. 4837. We also would be happy to share our project plans with other communities.

President's Page

THE END

I wish to extend my best wishes to Dr. Walker on his election as president. This choice is excellent and no doubt exists the Association will be in good hands for the coming year.

My primary thoughts on leaving office are concerned with the gratitude and thanks the many members deserve who so generously offered their time and talents to the function of the Association. For those who chaired or served on committees and commissions or supported efforts on legislative problems this organization owes them much. The accomplishments this past year are their successes.

A special tribute must be paid to the various county societies who so graciously invited us to their meetings. These opportunities for the officers and staff to visit the members in this fashion is invaluable. It serves to exchange information and hear the advice and counsel of members we see infrequently. The courtesies extended us will not be forgotten.

A sincere appreciation is extended from the Association and from me personally for the continued dedication and superb counsel received from both Ken Neff and Bill Schellpeper. This organization functions very well due to their skills along with their staff, Mary, Jan, Bobbie, and Susan.

Francis D. Donahue, M.D.

It has indeed been a pleasure being your president this past year. Thank you for this honor.

Francis D. Donahue, M.D.
President

The Auxiliary

ANNUAL STATE MEETING
APRIL 25 THROUGH APRIL 28, 1986

WHEREAS, we consider it fitting and proper to express our thanks to all who have contributed to the success of the Convention and the accomplishments of the past year, therefore be it

RESOLVED, that we, the members of the Nebraska Medical Association Auxiliary, extend our grateful thanks and appreciation to the officers and other members of the Nebraska Medical Association Auxiliary Executive Board who have so ably carried on the business necessary for the proper functioning of our organization, especially to our Past President, Elba Lau for her continuing interest and advice, and be it further

RESOLVED, that our thanks and appreciation be specified to the members of the Metropolitan Omaha Medical Society Auxiliary, hostess to this, the sixty first Annual Meeting, for the gracious hospitality extended to all of us; and be it further

RESOLVED, that we are expressly grateful that Mrs. Clair Cavanaugh, Vice-President of the North Central Region, American Medical Association Auxiliary, found it possible to meet with us during our sixty first year of our existence; and be it further

RESOLVED, that we declare particular gratitude to the President of MOMSA Auxiliary, Gerry Mountford, and her Convention Chairman, Barbara Bohi, and to Janis Haggstrom, Co-Chairman, their capable committee and all who thoughtfully planned for our entertainment and pleasure; and be it further

RESOLVED, that the Nebraska Medical Association be advised that we appreciated their assistance and leadership, that in particular we thank Francis D. Donahue, M.D., President of the Nebraska Medical Association, and his Commission on Social Affairs, that they be informed of our gratefulness for their help and advice throughout the year and for generously sharing with us those portions of their program we are privileged to attend, and be it further

RESOLVED, that Doctor Alan Forker Editor of the Nebraska Medical Journal, Mrs. John McGreer III, Editor of the Newsletter, Nebraska Medical Liability Mutual for their interest and monetary support of our Newsletter, Mr. Kenneth Neff, Executive Secretary of the Nebraska Medical Association, Mr. William Schellpeper, Assistant Executive Secretary, and to the State Medical Office personnel for their help in preparing materials and mailing the Newsletter, be apprised of our sincere thanks for the efficient way they handle our Auxiliary news, for their ready assistance whenever we ask for it, and be it further

RESOLVED, that we pledge our loyalty and devotion to the Nebraska Medical Association Auxiliary, that we continue to be faithful in supporting its activities, promoting its projects and protecting its reputation and high ideals, and be it finally

RESOLVED, that these resolutions be published in the NEBRASKA MEDICAL JOURNAL.

Respectfully submitted,
Mrs. Fay Smith
Resolutions Chairman

LEADERSHIP DEVELOPMENT WORKSHOP REPORT

In spite of the rain, snow and typical Nebraska winter on March 12, 1986, Nebraska Medical Association Auxiliary held a Leadership Development Workshop in Omaha at the Indian Hills Continuing Education Center. All county presidents, presidents-elect, state auxiliary officers, district councilors, and committee chairmen were invited. Due to the weather only 14 were in attendance.

Sandee Ourada, an Omaha Junior League trainer, covered the topic of Boardmanship. Topics covered were board structure, responsibilities of a board member and the tools to work with such as by-laws, budget and meeting records, and planning for the future 3-5 years. Using these concepts we learned how to plan our programs and be an efficient and effective leader. One important point: "You can delegate authority, but you cannot delegate responsibility." Sandee was a very enthusiastic and motivating speaker.

She also gave a short presentation on working with the media. Several booklets as guides were handed out and Sandee's main point was to get acquainted with the media and to learn what they needed from you to make the presentation usable. The booklets were from KMTV, Omaha World Herald and Omaha Junior League.

After lunch we had a very short idea exchange and covered the material from National Auxiliary. I hope this can continue in the future and be expanded.

Bev Kruger
President-Elect NMAA

Creighton University News:

C.U. SCHOOL OF MEDICINE RECOGNIZES FACULTY MEMBERS

The Creighton University School of Medicine has recognized six of its faculty members for their outstanding contributions to the school and the medical profession.

Recipients of the 1986 faculty recognition awards were selected recently from a group of nominees reviewed by an eight-member Committee on Faculty Recognition. The committee included seven faculty members receiving 1985 faculty awards and one Creighton administrator.

Dr. Joseph M. Holthaus, a professor of internal medicine, was named the 1986 recipient of the distinguished service award. Holthaus has been associated with Creighton for 32 years, serving as associate dean of the School of Medicine from 1965 to 1970 and as dean from 1970 to 1980. He also was acting chairman of the department of pathology from 1976 to 1980.

Dr. Henry T. Lynch, chairman of the department of preventive medicine and public health, was given the distinguished research career award.

Lynch, who joined Creighton's faculty in 1967, also is president of Creighton's Hereditary Cancer Institute. An internationally known pioneer in hereditary cancer research, he has written numerous articles and books on the subject.

Also receiving awards:

— James S. White, young investigator award. White, an assistant professor of anatomy at Creighton since 1981, is known for his research and articles on the neuroanatomy of the auditory system. Feshman medical students gave White the Creighton Medical Student Government Golden Apple Award for excellence in teaching in 1982 and 1983.

— Dr. Vincent Runco Jr., master clinician award. Runco, a professor of cardiology and director of the cardiac center outreach cardiology program, has been associated with Creighton since 1961. He was named master clinician for his understanding of disease processes and skill in the diagnosis and treatment of diseases and care of patients.

— Dr. William J. Hunter III, dedicated teacher award. An associate professor of pathology at Creighton since 1980, Hunter also received the Golden Apple Award for excellence in teaching from freshman medical students in 1982 and 1984.

— Dr. Syed M. Mohiuddin, continuing medical education award. Mohiuddin, who joined Creighton in 1970, is a professor of cardiology and director of the university's cardiology fellowship training program.

In Memoriam

By medicine life may be prolong'd
yet death
Will seize the doctor too.
—Shakespeare

PIONEER NEBRASKA SURGEON DIES

Dr. Joseph Alexander Weinberg, the man who fashioned "Joe's Hoe," a widely used surgical instrument, is dead at 91. He died Saturday, March 8, 1986 at UCLA Medical Center, 18 days after Ruth Lewis Weinberg, his wife for 58 years, died of cancer. Dr. Weinberg was a victim of the influenza epidemic and subsequent pneumonia.

He was born in Council Bluffs, Iowa, Sept. 18, 1894. He was a 1919 graduate of the University of Nebraska Medical School. He was professor emeritus of surgery at the Nebraska Medical School and at UCLA Medical School. He was chosen as visiting chair professor in surgery at the University of Washington Medical School in Seattle for two successive years.

Dr. Weinberg was a retired lieutenant colonel from the U.S. Army Medical Corps. He was severely injured in the Middle East during World War II, when he commanded the 186th Field Hospital on the east coast of Africa.

After recovery in Boston, he moved to Van Nuys, CA. He was Chief of Surgery and Chief of Staff at Long Beach VA Medical Center for many years. He also served with the American College of Surgeons in the tumor section before retiring, dividing his time between his office in Chicago and his home at Pacific Palisades.

Time magazine (Jan. 3, 1964) cited Dr. Weinberg in their man of the year issue — medical section — for his use of the vagatomy method, as opposed to resection, in stomach ulcer operations. "Joe's Hoe," a hoe-shaped medical instrument, was his invention and was used in his vagatomy procedures. Dr. Weinberg maintained that even though there was a much higher incidence of ulcer recurrence, the mortality rate (½ of 1%) was so low in first time (and even repeat) vagatomies, that it warranted recurrence risk.

In addition to that crusade, Dr. Weinberg, as a founding member of the College of Thoracic Surgeons, also fought during the years after World War II against smoking and for mandatory use of seat belts in automobiles.

As a leader of the L.A. Medical Society, he succeeded in banning cigarettes at meetings. He forbade smoking at the VA Hospital in Long Beach over 20 years ago.

Dr. James V. Maloney, chief of surgery at UCLA Medical Center and former student of Dr. Weinberg, stated that "Joe's lectures on medical ethics were among the most inspiring words I've heard."

Dr. Weinberg did not believe in "the media circus" as it might be harmful to the patient. Before World War II, Dr. Weinberg performed a successful diaphragmatic hernia correction on an infant less than a year old in Nebraska. He did not allow the press to use his name in reporting. A few months later, a celebrated surgeon in Boston performed the same operation on a 5-year-old — heralded as the "Upside Down Stomach" operation. It was in the press for weeks.

* * *

Bernard C. Burns, Sr., M.D. — (Born February 1, 1899 - died February 12, 1986) — Medical Specialty - General Practice. Doctor Burns was a graduate of Creighton University School of Medicine in 1924 and practiced in Omaha. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Otilla; son, Dr. B.C. Burns, Jr., Springfield; daughter, Patricia Leininger of Oakbrook, IL; two sisters, Francis Burns of Wichita, KS, and Mary Springer of Dallas, TX; nine grandchildren and three great grandchildren.

Dwight W. Burney, Jr., M.D. — (Born July 14, 1920 - died February 3, 1986) — Medical Specialty - Orthopaedic Surgery. Doctor Burney was a graduate of the University of Nebraska College of Medicine in 1943 and practiced in Omaha. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Kathryn; daughters Linda Norris of Lincoln and Kathryn Sandberg of Omaha; sons Richard Burney of Omaha and Dwight Burney III of Albuquerque, NM; father Dwight Burney Sr. of Polk, NE; brother Keith Burney of Hartington, NE and two grandchildren.

George P. Charlton, M.D. — (Born September 17, 1910 - died February 17, 1986) — Medical Specialty - Internal Medicine. Doctor Charlton was a graduate of the Univeristy of Nebraska College of Medicine in 1937 and practiced in Hastings, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Surviving are his wife, Mildred; one daughter, Cynthia Wordell of Los Altos, CA; one son, Doctor Kipp Charlton of Scottsdale, AZ; and four grandchildren.

Welcome New Members

Thomas R. Ashley, M.D.
3145 "O" Street
Lincoln, NE 68510

David A. Bigler, M.D.
600 N. Cotner, #311
Lincoln, NE 68505

Douglas A. DeBoise, M.D.
3145 "O" St.
Lincoln, NE 68510

Robert M. Ewart, M.D.
17th & N Street
Lincoln, NE 68508

Joseph L. Hranac, M.D.
600 N. Cotner, #100
Lincoln, NE 68505

Alexander Kingsley, M.D.
5440 South St., #900
Lincoln, NE 68506

Charles L. Kreshal, M.D.
3100 N. 14th, #201
Lincoln, NE 68506

S. Mahapatra, M.D.
1919 So. 40th, #320
Lincoln, NE 68506

Leonard T. O'Neill, M.D.
1701 So. 17th St.
Lincoln, NE 68502

David M. Schneider, M.D.
735 So. 56th
Lincoln, NE 68510

Thomas S. Stalder, M.D.
770 N. Cotner, #220
Lincoln, NE 68505

Michael F. Thompson, M.D.
301 So. 70th St., #330
Lincoln, NE 68510

Richard J. Thompson, M.D.
2221 So. 17th St., #308
Lincoln, NE 68502

Simon P. Zadina, M.D.
2221 So. 17th
Lincoln, NE 68502

Peggy Knittel, M.D.
302 Center Ave.
Morrill, NE 69358

William L. Beck, M.D. (reinstated)
2115 N. Kansas
Hastings, NE 68901

Delane A. Wycoff, M.D.
601 W. Leota
North Platte, NE 69101

Kenneth Johnson, M.D.
1401 East H St.
McCook, NE 69001

William P. Ellermeyer, M.D.
601 N. 30th
Omaha, NE 68131

Jeffrey B. Itkin, M.D.
8300 Dodge St.
Omaha, NE 68114

Richard L. Keller, M.D.
6901 N. 72nd St.
Omaha, NE 68122

Robert N. Troia, M.D.
2605 So. 84th St.
Omaha, NE 68124

R. Patrick Wood, M.D.
Dept. of Surgery
UNMC - 42nd & Dewey
Omaha, NE 68105

Coming Meetings

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

ADVANCED CARDIAC LIFE SUPPORT — May 1, 1986. Recertification. Omaha, Nebraska. Registration Fee: $50.00. 7.0 Hours AMA Category I. For further information contact: Ann Fitzgerald, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

NEBRASKA PATHOLOGY CONFERENCE — May 3, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Sponsored by Nebraska Association of Pathologists (4 credit hours)

FAMILY PRACTICE REVIEW, 1986 — May 5-16, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Approved for 87 hours of AMA Category I and AAFP Prescribed. One week and split sessions (one week of April session and one week of May session) accepted. "Mini" board exams given daily.

ADVANCED TRAUMA LIFE SUPPORT — May 21-22, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP. Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

ADVANCED CARDIAC LIFE SUPPORT — May 29-30, 1986. Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I. For further information contact: Ann Fitzgerald, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

CURRENT TREATMENT OF VENTRICULAR ARRHYTHMIAS TO PREVENT SUDDEN DEATH — June 6, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Guest speakers John Fisher, Montefiore Medical Center, New York, E. Neil Moore, D.V.M., University of Pennsylvania, Philadelphia and Joel Morganroth, M.D., Hahnemann University, Philadelphia. (6 credit hours)

CURRENT CONCEPTS IN NEUROLOGY — June 13-14, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. A practical neurology program designed for the primary care physician. (12 credit hours)

TETONS PEDIATRIC CONFERENCE — June 29-July 3, 1986, Jackson Role Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Pediatrics. Subjects to include Ophthalmology, General office pediatrics and gastroenterology. Guest speaker: Joan Hodgman, M.D., USC School of Medicine, Neonatologist. (17¼ credit hours)

TETONS SPORTS MEDICINE CONFERENCE—July 7-10, 1986, Jackson Hole Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Orthopaedic Surgery and Rehabilitation. Division of Sports Medicine. Guest speakers: Oded Bar-Or, M.D., Director of Children's Exercise and Nutrition Center, McMaster University, Hamilton, Ontario, Canada; John A. Feagin, M.D., President, American Orthopaedic Society for Sports Medicine (20 credit hours).

EMERGENCY MEDICINE REVIEW — September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

ADVANCED TRAUMA LIFE SUPPORT — September 15-16, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

EMERGENCY MEDICINE REVIEW — Octtober 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

LINCOLN GENERAL HOSPITAL

FIFTH ANNUAL CORNHUSKER/CANADIAN CLINICAL CONFERENCE — June 22-27, 1986. Lynn Lake, Manitoba, Canada. Fee: $150.00. For information, contact: Cathy Kinnaman, RN, Education and Staff Development, Lincoln General Hospital, 2300 South 16th Street, Lincoln, NE 68502, (402) 473-5638.

CREIGHTON UNIVERSITY

May 17-31, Update on Infectious Diseases & Endocrinology, 36 hours, Scandinavia Study/Tour. Fee: $400.00.

May 23-25, Family Medicine Update, Okoboji, Iowa.

May 26-29, Symposium on Foregut Disease, 24 hours, London, England. Fee: $50.00 with Travel Group.

June 7, Maurice Grier Symposium (OB/GYN), Marriott Hotel, Omaha, Nebraska.

June 16-30, GI Medical/Surgical Update, 36 hours, Germany Study/Tour. Fee: $400.00.

Aug. 29-30, Family Medicine Update, Okoboji, Iowa.

Sept. 18-30, Cardiology/Rheumatology Update, 36 hours, Ireland Study/Tour. Fee: $400.00.

For further information, contact the Division of CME, Creighton University School of Medicine, Omaha, Nebraska 68178 402/280-2550.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

INFECTION CONTROL: HOW DO WE LIVE WITH AIDS? — May 13-14, 1986. Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Fee: $90.00. Sponsored by the University of Kansas

Medical Center, Office of Continuing Education. Credit: 9 hrs. AMA Cat 1, AAFP.

ANNUAL SPRING SCIENTIFIC SEMINAR ON PATHOLOGY — May 17, 1986. Sponsored by the University of Kansas Medical Center, Office on Continuing Education. Location: Rieke Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA Cat 1.

FIFTH ANNUAL SUMMER MEDICAL SYMPOSIUM: "MEDICINE FOR THE PRACTICING PHYSICIAN"—July 10-13, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education and the University of Kansas School of Medicine, Wichita, KS 67214. Location: Broadmoor Hotel, Colorado Springs, CO. Credit: 15 hrs., AMA Cat 1. Fee: $375.00.

SCHEDULED MEETINGS

PREPREGNANCY RISK IDENTIFICATION AND REDUCTION — June 5 and 6. Sponsored by the Nebraska Department of Health. To be held at the East Campus Student Union, Lincoln. Plenary session speakers include James Hanson, M.D., Bruce A. Buehler, M.D., Kay Johnson, M.P.H., M.Ed., Betty Caan, Dr. P.H., Judy Capra, M.A., Howard Schwartz, M.D., Yvonne Green, R.N., C.N.M., and Judith Roepke, R.D., Ph.D. The purpose of the program is to explore and define preconception risk identification and reduction as strategies for reducing the infant mortality rate and the incidence of low birthweight. Registration fees are $25 for the two day conference. Continuing education credits have been applied for. For more information contact: Nutrition Division, Nebraska Department of Health, 402-471-2781. Preregistration deadline is May 23, 1986.

"MEDICAL TECHNOLOGY ASSESSMENT FOR HEALTH PROFESSIONALS" — June 16-20, 1986. Offered by faculty of the Sloan School of Management and visiting faculty as part of the 1986 MIT Summer Session. Continuing medical education credit for the program offered by the Office of Continuing Medical Education at Tufts University School of Medicine. A detailed description of the program is available upon request from the Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge, MA 02139.

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A Century
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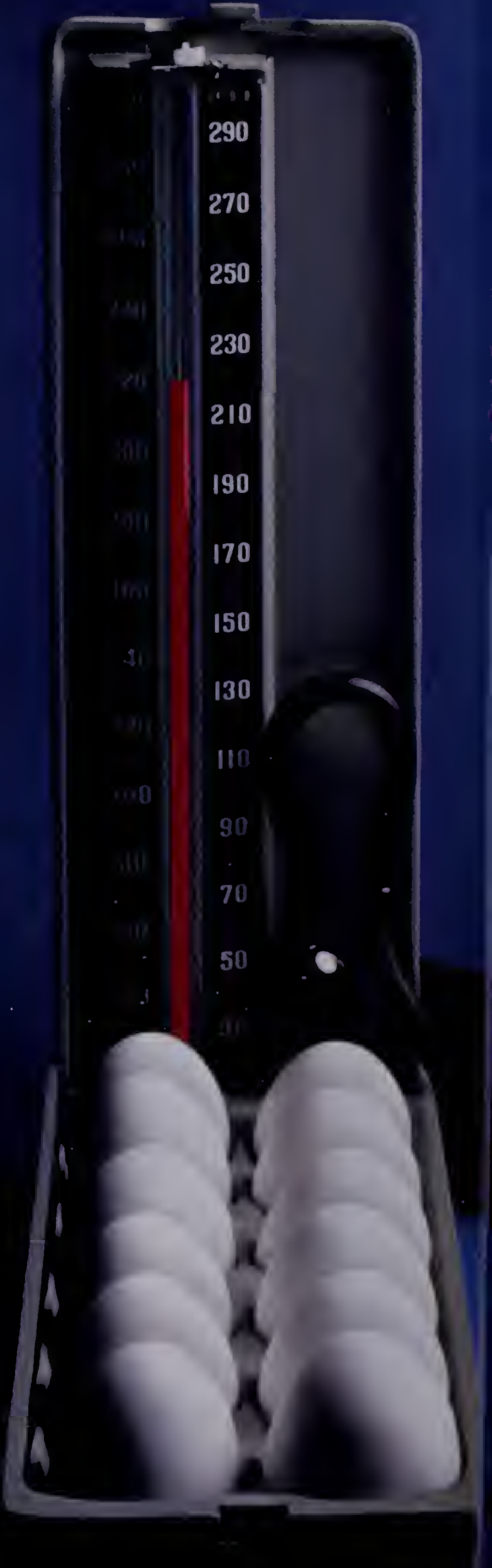
J-6138 January 1986

"High blood pressure should be a red flag to screen for cholesterol..."[1]



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If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk. Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

See important information on following page.

References: 1. Glueck CJ: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 2. *The Framingham Study. An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984: Vol 5, No 7, p 4. 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atherogenesis. *Progress in Cardiovascular Diseases, XXVI* (3): 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy
that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic.

Contraindication: Known sensitivity to the drug

Precautions: 1. Sedation Causes sedation or drowsiness in a large fraction of patients. When used with centrally active depressants, e g , phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2. Patients with vascular insufficiency Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure 3 Rebound Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology

INFORMATION FOR PATIENTS Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy Warn patients that tolerance for alcohol and other CNS depressants may be diminished Advise patients not to discontinue therapy abruptly

LAB TESTS In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease

DRUG INTERACTIONS **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e g , digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials However, potential for increased sedation when given concomitantly with CNS depressants should be noted

DRUG/LAB TEST INTERACTIONS No lab test abnormalities were identified with **Wytensin** use

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9 5 mg/kg/day, i e about 10 times maximum recommended human dose In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9 6 mg/kg), suggesting impairment of fertility. Fertility of treated males (9 6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy

PREGNANCY Pregnancy Category C WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1 0 mg/kg These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg) Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6 4 and 9 6 mg/kg There are no adequate, well-controlled studies in pregnant women **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus

NURSING MOTHERS Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers

PEDIATRIC USE Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U S and is based on data from 859 patients on **Wytensin** for up to 3 years There is some evidence that side effects are dose-related. Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b i d

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20% Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less Cardiovascular—chest pain, edema, arrhythmias, palpitations Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort Central nervous system—anxiety, ataxia, depression, sleep disturbances ENT disorders—nasal congestion Eye disorders—blurring of vision Musculoskeletal—aches in extremities, muscle aches Respiratory—dyspnea Dermatologic—rash, pruritus Urogenital—urinary frequency, disturbances of sexual function Other—gynecomastia, taste disorders

Drug Abuse and Dependence: No dependence or abuse has been reported

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic Vital signs and fluid balance should be carefully monitored Adequate airway should be maintained and, if indicated, assisted respiration instituted No data are available on **Wytensin** dialyzability

Dosage and Administration: Individualize dosage A starting dose of 4 mg b i d is recommended, whether used alone or with a thiazide diuretic Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response Maximum dose studied has been 32 mg b i d , but doses this high are rarely needed

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500, 8 mg and 16 mg, bottles of 100

Revised 2/14/85

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Ad Council

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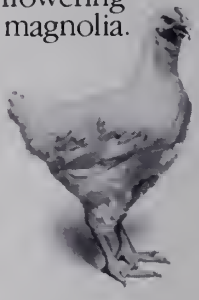
"1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."



Each one's a doozy,
but we're hoping you
won't use any of them.
Give blood through the
American Red Cross.
Please, don't chicken out.

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BLOOD DOES.

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Councilor Districts and Component County Medical Societies
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AMA News Notes

REPORT ON THE AMA BOARD OF TRUSTEES MEETING, APRIL 1-4, 1986

The Ad Hoc Committee On Foreign Medical Graduates (FMGs) issued its report and recommendations. The recommendations were made on the basis of review of AMA policy and advice and comment from many sources, including testimony presented at an open hearing in Chicago on Jan. 28, 1986, and a cross section of physicians. The 30 recommendations cover visa requirements, accreditation, credentialing, licensure, and participation in organized medicine, and international relations and medical education. They generally call for the AMA to reaffirm its current positions regarding FMGs, encourage participation in organized medicine by FMGs, and communicate relevant information on residency and practice to FMGs. The recommendations now go to the House for approval.

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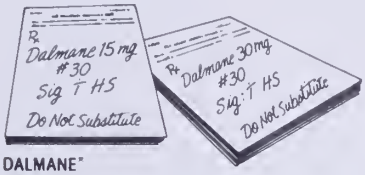

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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118 Years

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ıre prescribing, see complete prescribing information in SK&F CO.
ature or *PDR* The following is a brief summary

ARNING
nis drug is not indicated for initial therapy of edema or hyperten-
on Edema or hypertension requires therapy titrated to the individual
this combination represents the dosage so determined, its use
ay be more convenient in patient management Treatment of hyper-
nsion and edema is not static, but must be reevaluated as con-
tions in each patient warrant

raindications: Concomitant use with other potassium-sparing agents
as spironolactone or amiloride Further use in anuria, progressive
or hepatic dysfunction, hyperkalemia Pre-existing elevated serum
ssium Hypersensitivity to either component or other sulfonamide-
ved drugs

nings: **Do not use potassium supplements, dietary or otherwise,
ss hypokalemia develops or dietary intake of potassium is markedly
aired** It supplementary potassium is needed, potassium tablets
uld not be used Hyperkalemia can occur, and has been associated
cardiac irregularities It is more likely in the severely ill, with urine
me less than one liter/day, the elderly and diabetics with suspected
onfirmed renal insufficiency Periodically, serum K^+ levels should be
rmined. If hyperkalemia develops substitute a thiazide alone, restrict
intake **Associated widened QRS complex or arrhythmia requires
npt additional therapy** Thiazides cross the placental barrier and
ear in cord blood. Use in pregnancy requires weighing anticipated
efits against possible hazards, including fetal or neonatal jaundice,
mbocytopenia, other adverse reactions seen in adults. Thiazides
ear and triamterene may appear in breast milk If their use is essential,
patient should stop nursing Adequate information on use in children
ot available Sensitivity reactions may occur in patients with or with-
a history of allergy or bronchial asthma Possible exacerbation or
vation of systemic lupus erythematosus has been reported with
ide diuretics.

cautions: The bioavailability of the hydrochlorothiazide component of
zide' is about 50% of the bioavailability of the single entity
retically, a patient transferred from the single entities of triamterene
hydrochlorothiazide may show an increase in blood pressure or fluid
ntion Similarly it is also possible that the lesser hydrochlorothiazide
vailability could lead to increased serum potassium levels. However,
nsive clinical experience with 'Dyazide' suggests that these conditions
not been commonly observed in clinical practice Angiotensin-
verting enzyme (ACE) inhibitors can elevate serum potassium, use
caution with 'Dyazide' Do periodic serum electrolyte determinations
ticularly important in patients vomiting excessively or receiving
nteral fluids, and during concurrent use with amphotericin B or
icosteroids or corticotropin [ACTH]) Periodic BUN and serum
tinine determinations should be made, especially in the elderly
etics or those with suspected or confirmed renal insufficiency
ulative effects of the drug may develop in patients with impaired renal
tion Thiazides should be used with caution in patients with impaired
atic function. They can precipitate coma in patients with severe liver
ase. Observe regularly for possible blood dyscrasias, liver damage
r idiosyncratic reactions. Blood dyscrasias have been reported in
ents receiving triamterene, and leukopenia, thrombocytopenia,
inulocytosis, and aplastic and hemolytic anemia have been reported
thiazides. Thiazides may cause manifestation of latent diabetes
tus The effects of oral anticoagulants may be decreased when
concurrently with hydrochlorothiazide; dosage adjustments may be
essary Clinically insignificant reductions in arterial responsiveness
epinephrine have been reported Thiazides have also been shown to
ease the paralyzing effect of nondepolarizing muscle relaxants such
bocurarine Triamterene is a weak folic acid antagonist Do periodic
d studies in cirrholics with splenomegaly. Antihypertensive effects
be enhanced in post-sympathectomy patients Use cautiously in
cal patients. Triamterene has been found in renal stones in associa-
with the other usual calculus components Therefore, 'Dyazide'
ld be used with caution in patients with histories of stone formation.
w occurrences of acute renal failure have been reported in patients
Dyazide' when treated with indomethacin Therefore, caution is
sed in administering nonsteroidal anti-inflammatory agents with
zide' The following may occur transient elevated BUN or creatinine
oth, hyperglycemia and glycosuria (diabetic insulin requirements may
ltered), hyperuricemia and gout, digitalis intoxication (in hypokalemia),
easing alkali reserve with possible metabolic acidosis. 'Dyazide'
rferes with fluorescent measurement of quinidine. Hypokalemia is
ommon with 'Dyazide', but should it develop, corrective measures
uld be taken such as potassium supplementation or increased dietary
ke of potassium-rich foods. Corrective measures should be instituted
tiously and serum potassium levels determined. Discontinue correc-
measures and 'Dyazide' should laboratory values reveal elevated
m potassium. Chloride deficit may occur as well as dilutional
onatremia. Concurrent use with chlorpropamide may increase the risk
evere hyponatremia. Serum PBI levels may decrease without signs
hyroid disturbance. Calcium excretion is decreased by thiazides.
zide' should be withdrawn before conducting tests for parathyroid
tion. Thiazides may add to or potentiate the action of other anti-
ertensive drugs. Diuretics reduce renal clearance of lithium and
ease the risk of lithium toxicity

erse Reactions: Muscle cramps, weakness, dizziness, headache,
mouth: anaphylaxis, rash, urticaria, photosensitivity, purpura, other
matological conditions; nausea and vomiting, diarrhea, constipation,
er gastrointestinal disturbances; postural hypotension (may be
ravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis,
esthesias, icterus, pancreatitis, xanthopsia and respiratory distress
uding pneumonitis and pulmonary edema, transient blurred vision,
adenitis, and vertigo have occurred with thiazides alone. Triamterene
been found in renal stones in association with other usual calculus
nponents Rare incidents of acute interstitial nephritis have been
orted Impotence has been reported in a few patients on 'Dyazide',
ough a causal relationship has not been established.

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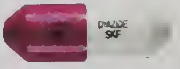

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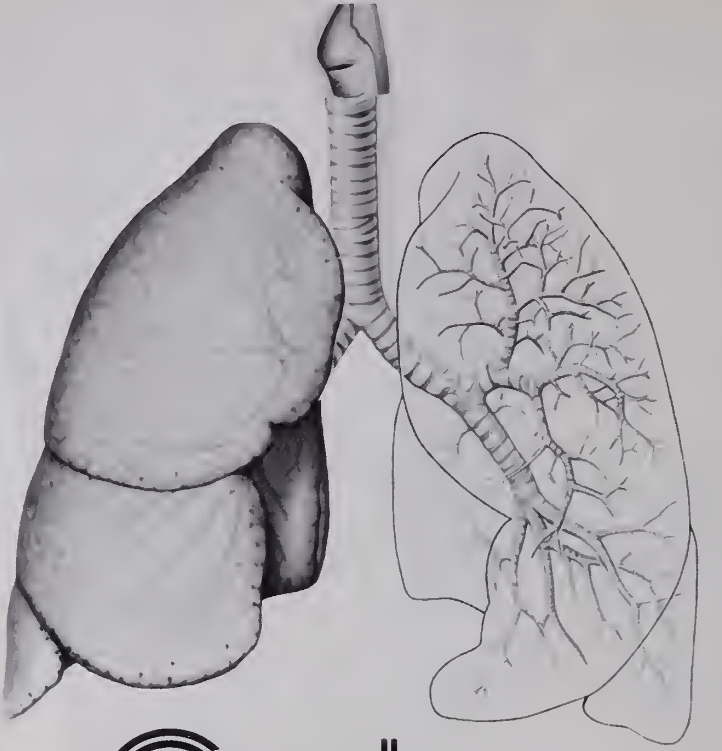

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Precautions:
- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reporte half of which have occurred in patien with a history of penicillin allergy
- Other: eosinophilia, 2%; genital pruritu or vaginitis, less than 1%.

Abnormalities in laboratory results uncertain etiology
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- Transient fluctuations in leukocy count (especially in infants and childre
- Abnormal urinalysis; elevations in BU or serum creatinine
- Positive direct Coombs' test
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Manuscripts describing original clinical or laboratory research should be limited to 2,000 words and approximately 20 references.

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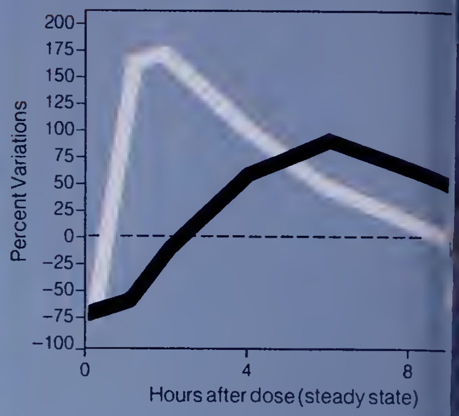

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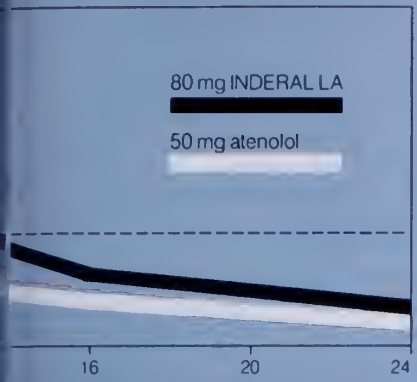

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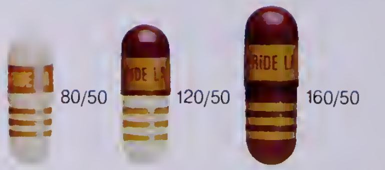

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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in: 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

THYROTOXICOSIS Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs.

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies

Beta adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS Patients receiving catecholamine-depleting drugs, such as reserpine should be closely observed if propranolol is administered The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18 month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug induced toxicity There were no drug related tumorigenic effects at any of the dosage levels Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well controlled studies in pregnant women Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

NURSING MOTHERS: Propranolol is excreted in human milk Caution should be exercised w propranolol is administered to a nursing mother

PEDIATRIC USE: Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL. Periodic determination of serum electrolytes to de possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electr imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and u electrolyte determinations are particularly important when the patient is vomiting excessivel receiving parenteral fluids. Medication such as digitalis may also influence serum electroly Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsin restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia gastrointestinal disturbances such as nausea and vomiting.

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is preser during concomitant use of corticosteroids or ACTH.

Interference with adequate oral electrolyte intake will also contribute to hypokalemia H kalemia can sensitize or exaggerate the response of the heart to the toxic effect of dig (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potas supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment ex under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may in edematous patients in hot weather, appropriate therapy is water restriction, rather than adm tration of salt, except in rare instances when the hyponatremia is life-threatening. In actua depletion, appropriate replacement is the therapy of choice.

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thi therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diat mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing di therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance.

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland hypercalcemia and hypophosphatemia have been observed in a few patients on prolo thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued b carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy pa Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not suff to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY. Pregnancy Category C. Thiazides cross the placental barrier and appear blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed ag possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocyto and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed ess the patient should stop nursing

PEDIATRIC USE Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mi transient and have rarely required the withdrawal of therapy.

Cardiovascular Bradycardia; congestive heart failure; intensification of AV block, hypote paresthesia of hands, thrombocytopenic purpura; arterial insufficiency, usually of the Ra type.

Central Nervous System Lightheadedness; mental depression manifested by insc lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, disturbances; hallucinations; an acute reversible syndrome characterized by disorientat time and place; short-term memory loss; emotional lability; slightly clouded sensoriu decreased performance on neuropsychometrics

Gastrointestinal. Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea pation; mesenteric arterial thrombosis; ischemic colitis.

Allergic. Pharyngitis and agranulocytosis; erythematous rash, fever combined with achi sore throat, laryngospasm and respiratory distress.

Respiratory Bronchospasm.

Hematologic. Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purp

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been repo

Miscellaneous Alopecia; LE-like reactions, psoriasiform rashes; dry eyes, male impotenc Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving th serous membranes, and conjunctivae reported for a beta blocker (practolol) have not associated with propranolol

Hydrochlorothiazide:

Gastrointestinal Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, consti jaundice (intrahepatic cholestatic jaundice); pancreatitis; sialadenitis

Central Nervous System Dizziness, vertigo, paresthesias; headache, xanthopsia

Hematologic: Leukopenia, agranulocytosis; thrombocytopenia, aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol, barbitura narcotics)

Hypersensitivity Purpura, photosensitivity, rash; urticaria, necrotizing angiitis (vas cutaneous vasculitis), fever, respiratory distress, including pneumonitis; anaphylactic react

Other Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness, restles transient blurred vision.

Whenever adverse reactions are moderate or severe, thiazide dosage should be redu therapy withdrawn

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THE NEBRASKA MEDICAL JOURNAL

Breast Cancer: A Century of Futility

JOHN B. DAVIS, M.D.
Clinical Associate Professor of Surgery, UNMC

AFTER nearly 100 years of treating the most common cancer in women, we are no nearer to its control, and there has been no change in its cure rate in the past two decades.[1,2,3] Since Halsted's contribution based on the observations of Valsalva (1704), LeDran (1757), Handley, and Virchow (1863) concerning breast cancer's origins in a local area and its lymphatic spread, the only improvement in cure rates has resulted from earlier diagnosis.

The **biopsy** remains a perplexing problem. Should it be done with local or general anesthesia?[4] in one or two stages?[5] by aspiration,[6,7] incision, or excision?[8] and should frozen sections by done?[9]

Perhaps these compelling questions can be resolved in the next 100 years.

Estrogen and progesterone receptors are touted by many as the most important prognostic factors available and that negative receptors dictate the use of adjuvant therapy.[10-13] Others report marked differences in estrogen receptor (ER) studies done on various areas of a tumor,[14-19] the same 10 year cure rates in ER+ and ER− cases, and that the ER status is not significant in terms of survival, time until relapse, or response to chemotherapy.[20-25]

"The eternal mystery of the world is its comprehensibility" (Einstein).

The operative treatment of breast cancer was local excision prior to Halsted's report of his radical mastectomy in 1891. Since then we have progressed from the radical mastectomy to the modified radical mastectomy of Patey in 1948 and the simple mastectomy followed by radiation therapy as proposed by McWhirter in 1949, back to the Halsted radical mastectomy, on to Urban's extended radical mastectomy, back to the modified mastectomy, and finally back to local excision variously referred to as lumpectomy, tylectomy, and quadrant resection. "The past 20 years may be characterized as an era best known for its 'personal experience' reporting". Initially, the only apparent rationale for returning to the local excision of malignant breast cancer was the patient's refusal to have a recommended radical mastectomy. "In a sense, those patients may claim responsbility for the immortality of those pioneers" such as Crile and Peters.[26]

The wheel has been rediscovered.

Axillary lymph nodes are regarded by some as "good guys" responsible for containment of the tumor by maintaining an intact immune system.[27,28] Others regard them as "bad guys" harboring deposits of tumor that can spread in the body just as metastases from the original tumor.[29] Many who advocate leaving the nodes intact add to the confusion by favoring the use of radiation and/or chemotherapy both of which inhibit the immune mechanism.[30,31] Of those recommending removal of the nodes, some favor only lateral node sampling[32,33] and others insist on total axillary node dissection.[34-37]

"Those who cannot remember the past are condemned to repeat it". (George Santayana)

X-ray therapy has been used pre-operatively, as adjuvant therapy, as primary treatment, or shunned. Whenever its value is challenged based on patient studies,[38-50] the new crop of Radiation Oncologists argue that newer techniques and equipment are better and will improve the results. The term "primary radiation" is being incorrectly applied when it is used after lumpectomy. If all the tumor in the body was removed by the lumpectomy, the ensuing radiation therapy will erroneously get credit for the cure. Many studies found adenocarcinoma of the breast to be radioresistant.[51, 52, 53]

The value of history is to help us avoid the mistakes of the past.

Chemotherapy has probably gotten more print than anything else in the history of the world. It has been used as an adjuvant to operations, in combination with hormone therapy[54, 55] in combination with x-ray therapy, as neoadjuvant therapy,[56] and for palliation. Various single agents were tried, multiple agent regimens were given their day,[57] followed by multiple agents in combination with adriamycin,[58] and as multiple variations of multiple agents.[59] Repeated disappointments led to large numbers of protocals with only minimal short term gains in limited numbers of patients.[60-63] "The desire to verify an hypothesis rather than to seek to refute it can be responsible for the suppression of deviant data." It is not clear whether chemotherapy acts directly on the tumor cell (seed) or by altering the microenvironment (soil).[64] In general, chemotherapy has only been effective in treating rapidly growing tumors containing little cellular variation and of mesenchymal origin (i.e. Hodgkin's Disease, Osteogenic Sarcoma, Ewing's Sarcoma, Neuroblastoma, and Wilms Tumor).

"When your tool is a hammer, everything looks like a nail."

Hormone therapy was initially used for palliation as the breast is an endocrine controlled organ.[65] Ovariectomy in pre-menopausal women or treatment with DES or premarin in post-menopausal women often resulted in temporary tumor regression. This was then expanded to including bilateral ovariectomy at the time of the mastectomy in women under 35 years of age. This only increased the clinical disease free interval without effecting the cure rate and was abandoned.[66] Now hormone therapy has been rediscovered and is being used as an adjuvant to operation alone or in combination with chemotherapy.[67]

Since we haven't conquered breast cancer let's at least give it the full treatment.

Multicentric breast cancer has been reported and used as a reason for either a complete mastectomy or adjuvant therapy.[68, 69, 70] Except for Lobular carcinoma, other investigators suggest multicentric breast cancers are mostly a pathologic curiosity rather than clinically significant.[71] They liken them to the microscopic tumors found in 30-40% of prostate glands in older men and up to 20% of thyroid glands at autopsy.

Perhaps this can be resolved by the flip of a coin.

Cystic disease was often noted to co-exist with carcinoma by surgeons and pathologists. This led to attempts to establish cystic disease as a pre-malignant process. No connection was found with the possible exception of marked intraductal hyperplasia or papillomatosis.[72-75] It was decided that breast cancer arose denovo. But then the medical oncologist was born and he grabbed eagerly for the breast. The co-existance of cystic disease with cancer became a reason to protect the patient from a second cancer of the breast by using chemotherapy. Before this concept was discarded, the diagnostic radiologist also discovered the breast through mammography. The predictable eventuality was the birth of Wolfe's parenchymal mammographic patterns.[76] The most dysplastic breasts were said to be of increased risk for developing cancer. Once again cystic disease was implicated as a premalignant process. Recent studies have shown no association between Wolfe's patterns and the subsequent development of malignancy.[77, 78] One editorial suggested cystic changes are so common in the female breast that it should no longer be referred to as a disease.[79] Another author concluded that cystic disease of the breast represents no particular threat to the woman in whom it is diagnosed except that she runs the risk of being terrorized by her medical attendants.[80]

In spite of the expenditure of millions of research dollars and man hours of study culminating in thousands of publications and reports at local, regional, national, and international meetings; the creation of hospital based Cancer Registries; and national cancer audits sponsored by the American College of Surgeons, biases based on emotionalism, personal interests, improper analysis, failure to recall or accept valid historical observations, improper reporting such as the use of short term results and historical controls, and commercialism have resulted in "no gain".[81] "if a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties". (Bacon 1605).

Now the woman whose breasts are still intact is looking to the next generation of physicians and researchers for basic biologic and genetic studies that might result in her protection. She is also hoping for an end to terms such as "re-staging" and "acceptable complications".

"But we of science must not offer unwarranted promises in quest of public favor and support; we must sustain the mutual trust between scientist and citizen that has fueled the triumphs of biologic science in this century."

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The Autopsy in Medical Science and Clinical Practice: Where Have We Been and Where Are We Going?

BRUCE A. McMANUS, M.D., Ph.D.[*]
JOHN A. BENEKE, B.S.
From: Departments of Pathology and Microbiology, Pediatrics, and Internal Medicine, University of Nebraska Medical Center, Omaha, NE

RECENTLY, one of us had the opportunity to discuss the autopsy as a medical grand rounds topic at the University of Nebraska Medical Center. It is a credit to the Department of Internal Medicine that the autopsy was chosen as substance for a grand rounds presentation. Renewed focus on the autopsy[1, 2, 3, 4] reflects the general reawakening among physicians that gross, histologic, cytologic, microbiologic, and cytogenetic observations at autopsy provide an essential basis of understanding for clinical syndromes and pathophysiologic disturbances. Current efforts to better understand and improve the financial underpinnings of autopsy programs[4, 5] may allow for expanded potentials for academic teaching and research emanating from autopsy studies.

In the following two-part discussion, we relate historical observations that have inferences for current autopsy practice, assess purposes of the autopsy and associated problems that face the autopsy, summarize the status of the autopsy in Omaha, and describe efforts at innovation being made at the University of Nebraska Medical Center. Finally, we suggest future directions which may allow the autopsy to play a revitalized and increasingly central educative, investigative and therapeutic role in medicine.

Lessons Learned

The relevance of the autopsy may be partially appreciated in the context of its past. Historical perspective for the autopsy has been provided by many authors but has been perhaps most clearly discussed by King and Meehan.[6] In brief, in the loosest of associations, the autopsy began with **animism,** a doctrine under which happenings on earth were subject to supernatural control. Gods could send plagues and pestilence if one was ill-behaved! About 1500 B.C. a subgroup of animists evolved who believed in hauruspicy (hepatoscopy), a form of divination. They studied the entrails of animals, particularly the liver, in efforts to predict the future.

Naturalism, championed by Hippocrates, then supervened as the dominant philosophical principal. To the Greeks of Hippocrates' era, "physiology" encompassed what we currently know as physics, physiology and anatomy. Physiology was considered to be a natural or a "pure" science. Anatomy was studied only in the "pure" sense and not in the pathological sense. However, human dissections were being done by about 300 B.C. and the solidist theory of disease gradually replaced the humoral theory. As such, illness and disease became attributable to abnormalities of solid organs. The solidist influence remains with us today. For example, the term "hypochondriasis" arises from the time when the spleen was felt to be the seat of the emotions. Because the spleen is below the ribs ("hypo" - below, "chondrium" - ribs = "hypochondrium") and because people who worried a lot were thought to have problems with their spleen, the designation "hypochondriasis" was an obvious, though erroneous, effort to relate human illness to abnormalities of solid organs.

The Medieval period was, of course, a virtual historical vacuum for the arts, the sciences and the "human condition". Correspondingly, the autopsy was conspicuous by its near absence. The only autopsies performed with regularity were those aimed at ruling in or out criminal behavior. The latter convention is still relevant today. Our society gives much greater financial, political and ethical priorities to the autopsy in questions of unnatural death than it does for even the most enigmatic "natural" death. Whether current forensic emphasis originated in the Medieval period is uncertain, but the similarity of beliefs is striking.

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[*] Address for Reprints: Bruce M. McManus, M.D., Ph.D., Director, Autopsy Program, Department of Pathology and Microbiology, UNMC, 42nd and Dewey Avenue, Omaha, NE 68105.

Religious objections to the autopsy were strong from 1100-1500 A.D. The church abhorred blood (except, of course, during the religious wars). The Medieval public held a great revulsion for anatomy, an emotional impediment still prevalent today. Anatomy remains most acceptable to the contemporary public in the context of objectifying commercials for automobiles, blue jeans, and treadmills! A parallelism of superficiality exists between people with a groundless aversion to medical anatomy and the sultry sex symbols soliciting sensitivity for Celicas: both groups believe that one can discern the depth of truth with only half the information visible.

The Renaissance period brought enlightment insofar as the autopsy was concerned. A publication by Benevieni,[7] **Some Remarkable Hidden Causes of Disease and of Cures** discussed 110 patients, fifteen of whom had autopsy examination to confirm or deny clinical impressions. A much more comprehensive work by Bonitas,[8] the **Sepulchretum,** followed in 1679. This volume includes findings from 3,000 autopsies. We have never had the privilege of reviewing the book. Such a review should be undertaken since classical accounts of disease states are most likely encompassed in the work. Soon after Bonitas, Boerhaave wrote two monographs[9, 10] which dealt mainly with autopsy methodology.

Morgagni made the first meaningful clinicopathologic correlations.[11] In Morgagni's time, permission for autopsies by relatives was not required for in-hospital deaths, a practice still current in Scandinavian countries. In Sweden the autopsy rate until recently was near 100%. If one was admitted to a hospital in Sweden, an autopsy was obligatory unless unusual family circumstances existed. The Swedish approach bears heavily on questions of accuracy of death certificates, on the relevance of family counseling, on the validity of clinical practice, and on progress in medical science.

Francois Xavier Bichat, a French physician and the "father" of histology, was a model whom Sir William Osler no doubt emulated. Bichat studied anatomy, physiology, and pathology, and provided bedside patient care. Through the integration of these four activities, he gained a better than usual understanding of disease processes. Countrymen of Bichat dominated medicine in the late Renaissance period. Courvisart, who was Laennec's mentor, made immense contributions, particularly to the pathology of cardiovascular disease. Although Laennec is often thought of in reference to the liver, his descriptions of the clinical and pathological features of tuberculosis were among the best. All of these physicians had the silver thread of clinical insight based upon anatomical pathology.

One can ask the question "Was Rokitansky or was Virchow more important in laying the foundation for the exponential advances in pathology and medical science of the 20th century?" Unanswerable. However, we think where Rokitansky erred in attempts at pathophysiological correlation based entirely on gross organ pathology, Virchow unknowingly has led several generations of high-powered (10,000X) pathologists into the deadend of histologic still-life. Only recently have pathologists escaped the tunnel vision of the light microscope in their search for etiologies and pathogenetic mechanisms. Yet both Rokitansky and Virchow had profound influence on contemporary approaches and methodology in pathology. Ironically, the gross pathological technique often referred to as the "Rokitansky procedure or method" is in fact the technique of LeTuele.[12]

At the beginning of this century, the multitude of purposes of the autopsy became more clearly recognized. Descriptive characterization of anatomic abnormalities was superseded by attempts to define a cause of death. In this spirit, Abraham Flexner authored a critique of medical education in the United States in 1910, and recommended a minimum number of autopsies (20% of deaths in community hospitals and 25% of deaths in academic hospitals) be required by every hospital.[13] The impact of this and other recommendations of Flexner was considerable; however, hospitals held to a legalistic connotation for the minimum autopsy requirement set by the Joint Commission on Accreditation of Hospitals (JCAH), and its demise in 1971 became inevitable.

In the late 1930's through the 1950's, particularly after the Second World War, the volume of autopsies rose dramatically in efforts by hospitals to appear self-evaluative and accreditable. It was not uncommon to have hospitals with an autopsy rate greater than 75%. In essense, hospitals and pathologists had been adhering to the Flexner recommendation for purposes of accreditation and began to lose sight of the real purposes of the autopsy. Concurrently, new technologies brought the development of the clinical laboratory. Medicine shifted diagnostically toward the biochemistry, hematology, and microbiology laboratories. Much of pathologists' time was consumed in the management of these exciting new avenues of patient investigation. A shift in pathology training was necessitated such that the subdiscipline of clinical pathology could be developed. Time spent in the activities of anatomic pathology diminished, and autopsies started to slide down the priority list. Autopsy rates fell rapidly. The fall was aided by the removal of the JCAH minimum autopsy requirement.[14] The JCAH has retained a vague position in relation to the autopsy since that time.[15]

Ironically, during the period that autopsy rates were declining rapidly, one can readily recall how many diseases and disorders were discovered and/or characterized in the autopsy room. Cannon, in 1956, listed several conditions not known or understood until autopsy observations were collated and published.[16] In more recent years many other conditions have been brought to light by autopsy studies.[17] Idiopathic hypertrophic cardiomyopathy, floppy mitral valve, cardiac ganglionitis, Legionnaire's disease and related pneumonias, several lymphoproliferative diseases, Reye's syndrome, and, most recently, adult and pediatric acquired immune deficiency syndromes are representative of other specific autopsy-based disease characterizations. The list is limitless (Table 1).

Neither clinical nor autopsy observations have yet explained enigmatic conditions such as the sudden infant death syndrome. However, beyond ruling out certain disease entities, the autopsy ensures a continued search for pieces to such medical puzzles. The causes and mechanisms of medical mysteries will only be determined by a synthesis of epidemiologic, clinical, autopsy, and experimental data.

Table 1
Representative Contributions of the Autopsy to Medical Knowledge

Bone:
Bone Tumors (Radium Water, Radium Chloride)

Cardiovascular:
Floppy Mitral Valve and Related Conditions
Hypertrophic Cardiomyopathy
Mesenteric Ischemia in the Young and the Old
Myocarditis and Ganglionitis
Postpartum Pituitary Necrosis (Sheehan's Disease)
Taxonomy of Congenital and Acquired Heart Disease

Hematologic:
Myeloid Metaplasia

Infections:
AIDS
Disseminated Moniliasis, Aspergillosis, and Other Fungi/Parasites
Micrococcal Enterocolitis
Whipple's Disease Including Coronary Involvement

Kidney:
Diabetic Glomerulosclerosis
Diethylene Glycol Nephropathy

Liver:
Viral Hepatitis

Lung:
Amniotic Pulmonary Embolism
Diffuse Interstitial Fibrosis
Fibrocystic Disease: Pancreas, Lung and Subsystem Involvement
Lipoid Pneumonia
Pulmonary Embolism vs. Pneumonia vs. Hemorrhage vs. ARDS vs. CHF

Neonatal:
Erythroblastosis Fetalis
Perinatal Deaths, Placentology

Systemic and **Metabolic:**
Amyloidosis and related conditions
Connective Tissue Diseases
Consequences of Chemotherapy and Radiotherapy for Cancer
Consequences of Hormone Therapy
Hemochromatosis
Hyperparathyroidism
Hypervitaminoses
Potassium Deficiency Syndromes
Reye's Syndrome
Tumor Biology with/without Treatment
Urethane Poisoning - Liver, Bone Marrow

Purposes of the Autopsy

The current purposes of the autopsy may be stated simply: 1) to improve the diagnostic accuracy of the clinical staff; 2) to improve the standard of patient care, thereby reducing clinical costs by more intelligent use of hospital and outpatient tests and facilities; 3) to study the impact of medical and surgical therapy, including chemotherapy and radiation therapy; 4) to provide entirely new data on diseases, drugs, invasive procedures, and surgery; 5) to provide information beneficial to the deceased's family, whether regarding a familial condition or a poorly-understood illness; 6) to establish a cause of death, singularly important in the coroner's or medical examiner's autopsy. In addition, autopsy tissues are integral to a growing list of educational, therapeutic and investigative programs.

Improvement of diagnostic acumen by autopsy examination has nebulous inference that may prevent, at times, the objective evaluation of this goal.[18] However, the process of clinical learning is one of exclusion of untenable diagnostic possibilities, and only by "testing clinical hypotheses" against the actual disease, i.e., organs and tissues at autopsy, can the process of exclusion be refined. Unfortunately, because medicine is by its nature an extremely serious-minded business, physicians are often loathe to change their point of view on a diagnosis or the series of pathobiological events leading to a patient's death. The current climate of public uncertainty about medicine and concurrent legal indiscretion mandate that we face the clinicopathological discrepancies together as professionals before third parties are involved. The unbelievably low autopsy rates in some geographical regions of the country have been fostered as much by fear of ligitation as by other circumstances. Ironically, the more indepth that autopsies are studied the greater the feasibility of reduced legal contention, by force of enhanced clinical insight.

Reduction of clinical costs with concomitantly more efficient and pertinent clinical care is every administrator's dream. The manner and extent to which insight gained from autopsies actually achieves a cost-effective change in clinical patient management is not resolved.

A novel and timely study by Guariglia and Abrahams[19] at Michael Reese Hospital in Chicago has provided a new dimension to the assessment of **cost effectiveness of autopsies.** In a retrospective evaluation of potential hospital reimbursement guided by diagnostic related groups (DRGs) in 100 consecutive autopsy patients, pathologic diagnoses added 6.6% ($p<0.001$) in potential reimbursable dollars. Twenty-one percent of cases had an increased reimbursement when autopsy diagnoses were considered along with clinical diagnoses. Embolic phenomena, endocarditis, causes of pneumonia, upper gastrointestinal tract hemorrhage, and cerebral lesions found at autopsy had the greatest impact on DRG's. Improved reimbursement would mean that approximately one-half of autopsy costs could be recovered directly instead of by the current financing mechanisms, while providing the quality control and educative function the autopsy serves. Of course, prospective payment for patient care is not allowed at the current time on deceased patients. However, the observations of the Chicago group tend to counter the predictions that DRGs would lead to a decreased number of autopsies.

The **ever-expanding number of imaging techniques** including ultrasound, computerized tomography, specialized angiography and magnetic resonance must rely not only on inter-technique comparison but also ultimately on the actual morphology of lesions. Anatomy will always be the "gold standard" for imaging! Ironically, in a recent national survey of variations of autopsy rates in different institutions, some pathologists have said that technological advances may warrant a decrease in autopsy rates. Considering the great cost of elaborate technologies, it seems reasonable that anatomic validation be an ongoing mechanism for quality control and technological refinement. Advanced diagnostic technologies have not diminished the number of unexpected diagnoses made at autopsy.[20] The nebulous but definite impact that radiologic - anatomic correlation may have on individual patient outcome (in response to disease or to therapy) as well as the far-reaching impact of morphology on directions of technology, technology survival, and justification of expensive assessment modalities is clear.

Recently, the boundaries of **autopsy applications** have been expanded by King[21] in a perspective on the potential of the autopsy. Among applications of autopsy information, the use of health statistics derived from autopsies to guide allocation of research monies for specific diseases has promise. Illustration of the direct research activities possible through the autopsy can lead to grants or contractual funds for institutions with "adequate" autopsy rates and patient days. Certainly the National Institutes of Health has recognized the direct potential of autopsies in the investigation of cardiovascular disease in their recent approval and funding of an autopsy-based multi-million dollar multicenter study of the pathobiological determinants of atherosclerosis in youth, a study headed by Robert W. Wissler, M.D. at the University of Chicago and including the University of Nebraska Medical Center.

The need for **evaluation** of the human impact **of medical and surgical interventions** has never been greater. Therapeutic options have never been more diversified, or more potentially helpful and harmful at the same time. In the spirit and wisdom of academic progress and pharmaceutical profiteering, the pharmacopiae has swelled; the surgeon is more skilled and daring, and the rationale and zeal for "combination" therapies of various sorts has blossomed. The direct and indirect outcomes are correspondingly more complex. **New bodily adaptations, new complications,** and **new clinical syndromes** have ensued. The anatomic and pathologic bases of these outcomes are in an ever-changing state. One method of assessment is by autopsy. Ventilatory support in infants, organ transplantation, immuno and chemotherapy, and prosthetic materials and devices are exemplary interventions with undefined limits of pathobiologic impact that must be partially clarified at autopsy.

Reciprocally, with evolution of prosthetic devices, the need to evaluate the **impact of the host on prostheses** will escalate in the next few years. The intricacy and heterogenous origin of prosthetics are complemented by an equally overwhelming number of sites in which prosthesis may be used (Table 2). The pathologic changes in such devices/tissues have received most attention insofar as the cardiovascular system; however, those in other locations demand similar, if not greater scrutiny. Autopsy (or surgical explantation) is the major route for such assessment. Species differences in host-prosthetic interactions preclude the complete reliance upon experimental animal experience.

Table 2
Representative Types of Prosthetic Materials and Devices and Their Current and Potential Sites of Utilization in People*

Types	Sites
I. Conduits	heart, peripheral vessels, central nervous system, fallopian tubes, biliary system, ureters, bladder and urethra, ears, airways
II. "Muscles"	bionic limbs, sphincters - digestive and excretory, penile implants.
III. Organ System Replacements (whole or part)	heart, heart-lungs, pancreas, portable kidneys, bones and joints including cosmetic surgery, ears - electronic and ossicles, ocular - eyes and lens, blood, dental - teeth and bones.
IV. Miscellaneous Implants	pacemakers, automatic implantable defibrillators, breasts, intrauterine contraceptive devices, radiotherapeutic (multiple sites)

*This partial listing does not include the many temporarily inserted devices, eg. catheters and endoscopes, which may result in significant host response or injury.

Perhaps the greatest potential benefit to be derived from the autopsy is the **transmission of comforting information to families** of the deceased. Follow-up person-to-person or telephone conferences by pathologists, primary physicians, nurses and social workers are often not consistently scheduled, conducted or emphasized. Few hospitals have an office or a person devoted to, or a policy directed towards, coordinated follow-up of grieving families. Such a professional liaison, interfacing between specialist clinicians, primary physicians, pathologists, nurses, social workers and clergy would be a highly "cost-effective" investment. **Public trust** can only be built and maintained by such efforts.[22]

Deaths associated with extraordinary psychological and emotional stress, as in infant death, have prompted the federal government to endorse routine postmortem telephone or mail follow-ups by **pathologists.** The approach is well outlined by Valdes-Dapena.[23] She emphasizes that such conferences have an equally vital role in forensic and non-forensic pediatric and adult deaths. Any success in minimizing the residual unknowns for family members will allay the concomitants of grief, particularly guilt and anger. So often one hears families lament that they never heard a word from the medical team following death of a loved one. The autopsy provides a broader scope of possibilities for reassurance. Such opportunities must not be missed!

Unexpected findings reflect another great value of the autopsy. The ultimate value is in the translation of such findings to clinicians as well as to grieving family members. All autopsy services have a repertoire of case histories wherein the major disease process was "invisible" to the most discerning clinical eyes. In these situations, the autopsy provides the essential retrospective anatomic-clinical correlation, lifting the "IQs" of clinicians and pathologists for a given set of clinical signs and symptoms.

An anecdote about a man with congenital partial pericardial defect graphically illustrates the above point. Along with our colleague, Dr. Jerry Jones, we have reviewed the occurrence of sudden death associated with a clinically unknown pericardial defect in a previously healthy 25-year-old man.[24] He was found at autopsy to have strangulated ventricles protruding through the congenital pericardial defect. More probable diagnoses, congenital valvular aortic stenosis, hypertrophy cardiomyopathy (>50% familial), extremely premature coronary atherosclerotic disease (familial), pulmonary embolism, or berry aneurysm (at times associated with syndromes) would have had much different implications for a family than an extremely rare condition which has killed only 5 people in 200 years.[24] Unfortunately, of deaths in society, the least likely to be investigated by autopsy are those of people dying suddenly at home or in the community for whom foul play is not suspected. The coroner's or medical examiner's office is often too busy to consider them, and no other financial or logistical provision exists in society whereby non-forensic out-of-hospital deaths will be autopsied. This amounts to several hundred unexplained deaths per year in Omaha alone.

Defining the **cause of death** has long been the charge of forensic pathologists.[25] This focus has understandable justification. However, in the realm of "natural" forensic and non-forensic deaths the precise **proximate** cause of death is often unclear. A mechanism or pathophysiologic circumstance of death may be extractable but a **cause** may not. In this light efforts to supply logical "syllogistic" information for death certificates are fraught with great potential for "error" in the complicated patient. This problem is accentuated by the often ill-understood distinction between mechanism and cause of death. Reliance upon "call-ridden" clinical or pathology housestaff for such information may cast further doubt about validity. The penchant for a "cause of death" by clinicians and pathologists, added to the probability of hastily conceived and arbitrary designations, in the final analysis, may have little accuracy or significance.

In summary, the purposes of the autopsy are manifold and continue to broaden. The boundaries are limited only by the pathologist's interest, imagination and flexibility, by the clinician's openmindedness and ability to relate to families, and less so, by financial boondoggles. Progressive and optomistic attitudes toward the role of the autopsy in medicine will ensure its survival. All physicians, clinicians and pathologists alike, must remember that the processes of learning in medicine are obligatorily consultative and collaborative. Just as vestiges of any anachronism, the autopsy, without fulfillment of its purpose, will wither and die.

*This is Part I of a 2 Part series. Part II will appear in next month's issue.

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Intraoperative Electron-Beam Facility at the University of Nebraska Medical Center

P. PRADEEP KUMAR, M.D.*
Professor and Director, Radiation Oncology
ROGER R. GOOD, M.D.
Assistant Professor, Radiation Oncology
PAUL E. HODGSON, M.D.
Professor, Department of Surgery
JAMES A. EDNEY, M.D.
Assistant Professor, Department of Surgery
ERNEST O. JONES, PhD
Professor, Radiation Physics
WEI KOM CHU, PhD
Associate Professor, Radiation Physics
BRUCE E. McANULTY, RTT
BARBARA DUNLAP, RTT
SALLY S. ROGERS, RTT
GAYLE F. McCAUL, RTT
MICHAEL A. REEVES, RTT
CHERYL K. SANDERS, RTT
Radiation Therapy Technologists of the Division of Radiation Oncology
From the University of Nebraska College of Medicine, Omaha, Nebraska

A major goal of radiation oncologists is to increase the local cure of cancers without causing morbidity or mortality. This goal has been reached in part by the transition from orthovoltage external-beam x-ray units, to the use of supervoltage^{60}Cobalt teletherapy machines, and finally to the use of modern megavoltage linear accelerators which produce deeply penetrating photon beams with minimal dose given to the surface skin. Now the limits of megavoltage radiotherapy are being reached, mainly due to the radiation tolerance of normal tissues which surround the tumor. Several new methods for improving the local cure rate by increasing the dose beyond that which can be delivered safely by megavoltage external-beam radiotherapy are under development and testing. One of these methods, intraoperative electron-beam therapy (IO-EBT), will be described in this paper.

Conventional adjuvant external-beam megavoltage photon irradiation in the dose-range of 4,000-5,000 rad delivered to surgically undisturbed regional lymph node regions has been shown to be very effective in controlling subclinical microscopic metastases from primary sites in the head and neck, rectum, and breast.[1, 2, 3, 4] Following surgical tumor resection, because of disruption of tissue planes and regional blood supply — presumably causing tissue hypoxia, a higher external-beam photon radiation dose on the order of 5,500-6,500 rad is required to achieve sterilization of microscopic residual tumor.[5] If the tumor is unresectable, or if gross residual disease remains at either the primary tumor site or in the regional lymph nodes after surgery, fractionated external-beam photon radiation doses in the range of 8,000-10,000 rad or higher are required in order to achieve local tumor control.[1, 2, 3, 6] Doses in this range cannot be safely delivered by conventional external-beam radiotherapy to any deep-seated tumor in the body without causing significant morbidity and mortality.[7] Intra-abdominal organs have a relatively low tolerance to external-beam radiotherapy, and doses higher than 5,000 rad of megavoltage photon radiation cannot be delivered to large volumes. Doses of 6,000-6,600 rad may be delivered by external-beam photon radiotherapy to small "boost" volumes in selected cases using a multiple field technique (Figure 1). Because of these well-defined normal tissue organ tolerances, megavoltage photon radiotherapy frequently cannot be safely delivered in doses high enough to result in long-term local tumor control when administered via a conventional external-beam approach. Three different radiotherapeutic techniques, which avoid normal-tissue organ toxicity problems encountered with external-beam radiotherapy, have been developed in order to safely deliver high localized doses of 8,000-10,000 rad or more. The first is Interstitial Endocurietherapy (ECT) or implant of the tumor with radioactive seeds. Interstitial Endocurietherapy with either removable ^{192}Iridium ribbons, or permanent ^{125}Iodine seeds is used alone (or in combination with external-beam radiotherapy) for treating primary cancers of the vagina, anus, head and neck, breast, prostate, brain, pancreas, soft tissue sarcomas, cervical stump cancers, locally advanced cervix cancers, and for treatment of recurrent pelvic tumors.[8, 9, 10, 11, 12] Intraoperative Endocurietherapy (IO-ECT) is also commonly used to deliver high localized radiation doses to the surgical bed following tumor resection, especially for abdomino-pelvic recurrences, soft-tissue sarcomas, and glioblastomas.[13]

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*Address for Reprints: P. Pradeep Kumar, M.D., Director, Division of Radiation Oncology, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68132.

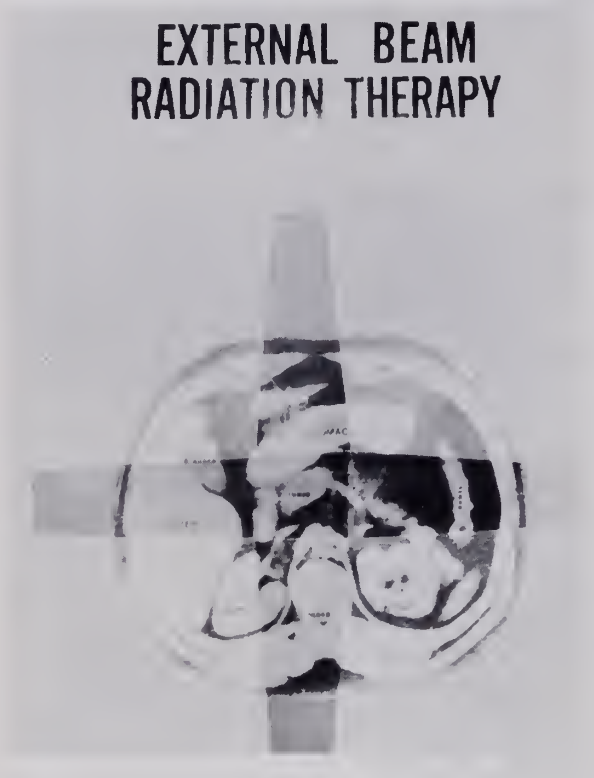

Fig. 1. Conventional 4-field external-beam radiotherapy technique used to treat tumors in the head of the pancreas. Note the normal tissues which are in the path of the external megavoltage photon beam.

The second method is removable "Intraluminal" or "Intracavitary" placement of radioactive sources into body cavities.[14-17] Intraluminal Endocurietherapy combined with conventional external-beam radiotherapy is used for treatment of primary cancer of the uterine cervix, endometrium, esophagus, bladder biliary tree and for cystic intracranial tumors.

The third method is intraoperative electron-beam therapy (IO-EBT). The basic concept of the latter technique is illustrated by Figure 2. Figure 1 shows the conventional external-beam approach for treatment of a pancreatic tumor. The high-dose is delivered to the pancreas by the additive effect of four separate megavoltage photon radiation beams which converge at the pancreatic tumor site. This conventional method does allow a higher target dose than would be possible if only one or two external photon beams were used; however, it can be seen that surrounding normal vital structures such as stomach, kidney, spinal cord, small bowel, and liver also receive radiation doses which approach their normal tissue tolerance limits ($TTD_{5/5}$ (Tissue Tolerance Dose), or 5% risk of complication in 5 years).[7] Using the conventional method, radiotherapy is fractionated at a rate of 200 rad/fraction, and is given 4 days/week. With the intraoperative technique illustrated in Figure 2, only the tumor or resected tumor bed is irradiated, and surrounding vital

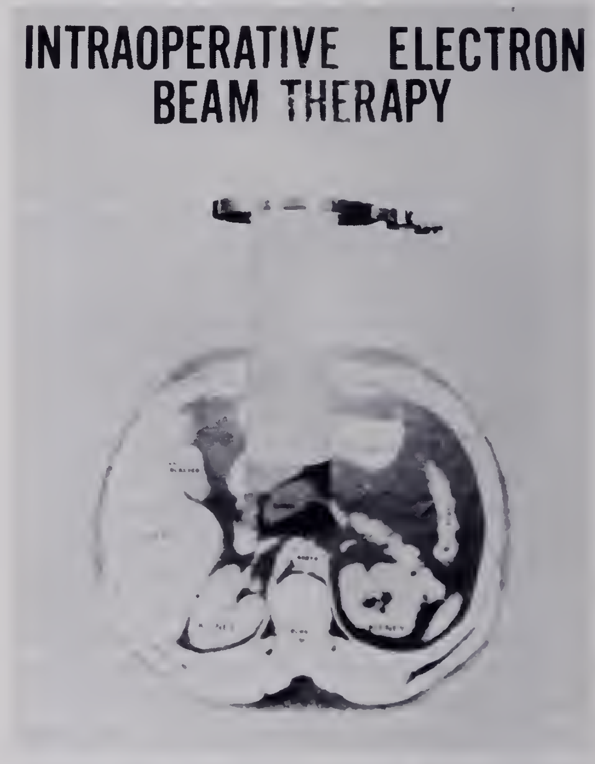

Fig. 2. Shows the Intraoperative Electron-Beam Technique (IO-EBT). The treatment cone is in position over the head of the pancreas. The plexiglass treatment cone separates and shields adjacent normal structures from the path of radiation, and the use of an Electron-Beam avoids irradiation of structures beyond the sharply-defined tissue-penetration limit of the electrons.

structures receive no radiation at all. The intraoperative irradiation is done with an electron beam, and a single dose of 1,500-2,000 rad is given. After recovery from operation, an additional 5,000-6,000 rad of fractionated external-beam megavoltage photon radiotherapy should be administered in the conventional manner over 6-8 weeks. The details of the technique will be described below. Because the 1,500-2,000 rad intraoperative dose is delivered in one large single fraction in a period of minutes, rather than in multiple small daily fractions over a period of weeks, the tumor-kill effect of IO-EBT is much greater than the effect of the same dose administered in a conventional, fractionated manner. This is attributed to the known ability of tissues to repair "sublethal" radiation damage.[18] If part of the damage caused by the small dose is repaired, then a larger total dose is needed to obtain the desired effect. The single fraction of 1,500-2,000 rad is approximately equivalent to 3,000-4,000 rad[19] conventional fractionated radiotherapy because this dose exceeds the capacity of the treated tissue to repair radiation damage. Thus, when an IO-EBT dose of 1,500-2,000 rad (equivalent of 3,000-4,000 rad conventional radiation) is followed by a conventional dose of 5,000-6,000 rad given in 6-8 weeks, the target tumor equivalent dose of 8,000-10,000 rad is achieved. This dose is sufficient for local control of both microscopic residual disease within a hypoxic, resected tumor bed, and gross residual tumor, as well as unresectable tumor.

University of Nebraska Intraoperative Electron-Beam Facility and Technique

Construction of the dedicated intraoperative electron-beam suite at the University of Nebraska Medical Center was completed in 1985, and the first patient was treated in August, 1985. The intraoperative suite is equipped as a standard operating room with a filtered air system, nitrous oxide, medical air, and oxygen lines, multiple overhead operating room lights, and other standard equipment utilized by surgery and anesthesia. The intraoperative suite houses a Siemans Mevatron-20 Linear Accelerator which produces electron beams of 3MeV, 7MeV, 12MeV, 15MeV, and 18MeV. The mobile treatment couch has been modified so that surgical equipment can be attached securely to its steel rails. The couch can be moved from a remote console without approaching the sterile field. Multiple television cameras are present which are used to monitor both the anesthesia equipment and the patient(Figure 3).

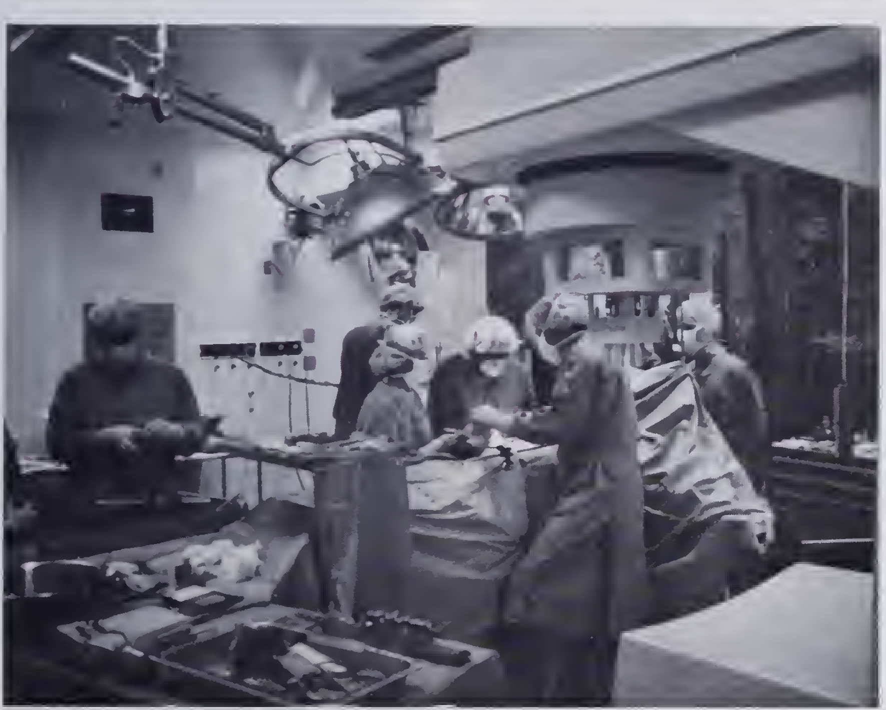

Fig. 3. View of the intraoperative suite and dedicated linear accelerator at the University of Nebraska Medical Center.

The patient is first prepped and draped in the intraoperative electron-beam therapy operating suite in the usual fashion on the modified treatment couch which serves as a mobile operating table. General anesthesia is induced. The operation usually consists of exploration with an attempt at complete tumor resection or de-bulking. The surrounding normal tissues are retracted away from the surgical tumor bed. If tumor is unresectable, then the unresected tumor is also exposed as completely as possible. The retractors holding the normal tissues away from the tumor bed are firmly attached to a surgical frame. The radiation oncologist positions a lucite docking treatment cone directly over the tumor or resected tumor bed. Care is taken to assure that radiosensitive structures such as bowel, stomach, kidney, and liver are outside the treatment cone. Docking treatment cones are available in several sizes of 6, 8, and 10 centimeter diameter. If a treatment area larger than this is desired, then the area is covered by abutting treatments. Once the cone is in place, both the surgeon and the radiation oncologist can directly visualize the tumor or tumor bed to be treated by looking down into the treatment cone(Figure 4). If the position and angle are correct, then the cone is securely fixed in place by attaching it to a special flexible and self-retaining stainless steel arm. This is a time-saving improvement in technique, compared to other techniques where the tumor area to be treated must be indirectly visually checked through optical devices after the docking is complete. With our technique, the treatment cone is immobilized before docking, and after docking, no further checking of position is necessary. From the remote console, the operating table is positioned under the linear accelerator, which is then docked to the treatment cone (Figure 5). All personnel leave the room, and the patient's vital signs are monitored by anesthesia on closed-circuit television. An electron energy is chosen to correspond to the measured treatment depth. Normally, an energy of 10 MeV, 12MeV or 15MeV is chosen. The electron-beam radiotherapy is delivered at a dose rate

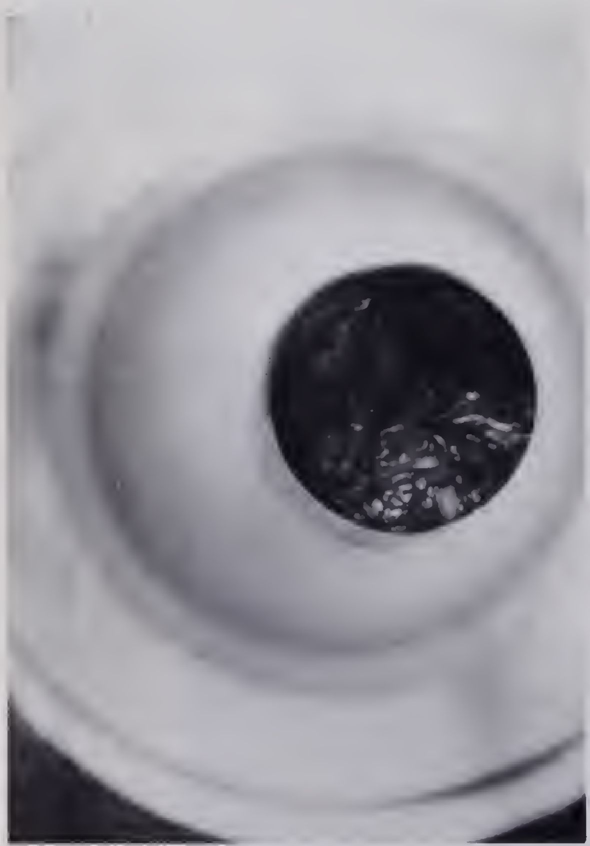

Fig. 4. View of the tumor bed as seen through the treatment cone prior to docking to the linear accelerator.

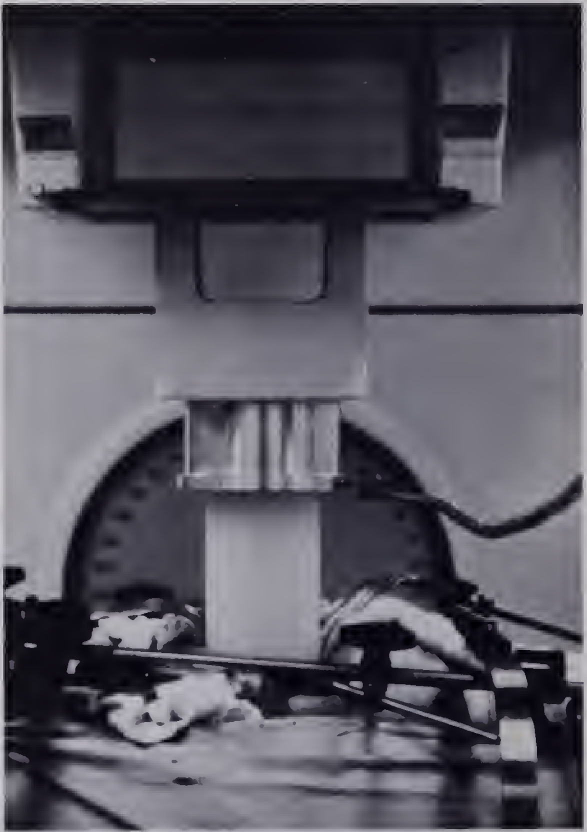

Fig. 5. Electron-Beam treatment cone after docking to the linear accelerator just prior to intraoperative electon-beam therapy. Note the cone held in place by the self-retaining arm.

of 200 rad/minute; 1,500-2,000 rad is delivered in one 8-10 minute session. Following IO-EBT, the treatment cone is removed, and the wound is closed. Two to four weeks later, after complete wound healing, a conventional course of fractionated external-beam radiotherapy consisting of 5,000-6,000 rad is given.

Indications for Intraoperative Electron-Beam Therapy

Intraoperative electron-beam therapy (IO-EBT) has been used in the management of primary neoplasms of the stomach, colon, pancreas, biliary tree, bladder, prostate, lung, mediastinum, brain, and in sarcomas of trunk or extremities. At the University of Nebraska, our current aim is to apply IO-EBT to the management of primary cancer of the pancreas, stomach, bladder, colon, and soft tissue sarcomas of the trunk and extremity. IO-EBT may be used to treat retroperatoneal tumors, and we are using IO-EBT to treat biopsy-proven positive metastases to the periaortic nodes from primary cancer of the endometrium and uterine cervix. IO-EBT may be used to treat recurrent intra-abdominal and pelvic tumors.

However, in this clinical situation we have noted in our review of pelvic recurrences of colorectal cancer[20] that approximately three-quarters of patients with locally recurrent tumors also have subclinical disseminated distant metatases at the time of diagnosis of local recurrence, which renders these patients incurable. Therefore, patients with locally recurrent tumors need to be carefully selected in order to avoid administering a curative course of IO-EBT when disseminated disease is already present.

Status of Intraoperative Electron-Beam Therapy

The first IO-EBT facility in the United States was developed and used by Drs. Henschke and Kumar in the 1970's at Howard University.[21] This was a dedicated facility, similar to the one described in this paper. Later work was accomplished at the Howard facility by Goldson. In a phase I toxicity study, Goldson[22] concluded that IO-EBT doses should be reduced below 3,000 rad if the treatment volume exceeds 10cm.[3] Initially, IO-EBT was used primarily for treating large unresectable tumors. Recently, the Howard group has reported good long-term results in patients with gynecologic cancers with periaortic nodal metastases.[23] Subsequently, an IO-EBT facility was built at Massachusetts General Hospital (MGH), and a pilot study of IO-EBT was begun in May, 1978.[24] At MGH, IO-EBT was used as a "boost" dose of 1,000-1,750 rad, and it was combined with a conventional course of fractionated external-beam radiotherapy of 4,500-5,000 rad. Surgery and IO-EBT were performed in separate but connected buildings. The authors concluded that although more follow-up is needed, treatment of locally advanced unresectable, residual, or recurrent cancers by IO-EBT combined with external beam photons resulted in good local control, and acute and chronic severe morbidity was low.[24]

Another intraoperative program was initiated in 1978 by the Surgery and Radiation Oncology branches of the National Cancer Institute (NCI). In the NCI program, the operating rooms and radiation therapy suite were separated by 13 floors and several hallways.[25] In experiments of normal tissue tolerance to IO-EBT, it was concluded that dogs receiving irradiation of the retroperitoneal space demonstrated no acute toxicity after doses up to 5,000 rad. Both the aorta and vena cava were also shown to tolerate doses up to 5,000 rad. The ureter showed mural thickening and fibrosis at doses of 3,000 rad. Irradiation of functional small or large intestine resulted in perforations at doses of 3,000 rad or more. The bile duct was also noted to be moderately radiosensitive, and complete bile duct obstruction occurred after 4,500 rad. After completion of the dog experiments, it was felt that an intraoperative dose of 2,000 rad in a single fraction would be safe for clinical use. In 20 treated patients, it was concluded that the incidence of complications resulting from the addition of IO-EBT was no greater than the incidence of complications expected from surgery and postoperative radiation.[25]

At the Mayo Clinic existing facilities in the Division of Therapeutic Radiology were renovated in 1981 to provide a temporary facility for IO-EBT using a Clinac-18. The major focus was on unresected or residual gastrointestinal malignant lesions (pancreatic, colorectal, and biliary), and soft tissue sarcomas. In a recent report[26] on 50 treated patients, the Mayo Clinic group noted that both short-term and long-term morbidity were acceptable, and that disease-free survivals were excellent in the colorectal and biliary subset of patients.

For patients with locally advanced colorectal cancer, local control in both the MGH series[27] and the Mayo Clinic series[26] were extremely high when the three modalities of external beam irradiation, surgical resection, and IO-EBT were combined, independent of sequence. In the MGH series, only 1 of 28 patients (3.6%) treated in this manner subsequently had a central or local progression of disease. In the Mayo Clinic series of locally advanced colorectal patients, two local regrowths were found within the external beam field, but there were no local recurrences within the area treated by IO-EBT. Using conventional external-beam radiotherapy after surgery, one would have expected local recurrence rates ranging from 15-26% for microscopic residual, and >50% for gross residual tumor.[28, 29]

As the results of Phase I clinical trials are published, the limitations of IO-EBT are becoming better defined. According to the NCI group, the radiation tolerance of peripheral nerves may be a limiting factor in application of IO-EBT to the sacral and sciatic regions. In a group of 40 patients receiving IO-EBT to pelvic and retroperitoneal tumors,[30] 3 patients have shown clinical evidence of peripheral nerve injury within 4-7 months following single doses of 2,000-2,500 rad. Two patients with posterior thigh sarcomas who received IO-EBT also developed neurological injury. Two of these 5 patients showed no recovery of nerve function and later developed near complete loss of extremity function. This problem was also studied in 21 dogs by giving a single fraction of IO-EBT to the lumbosacral plexus and sciatic nerve in doses ranging from 2,000 to 7,500 rad. Nineteen of 21 dogs developed hind limb motor changes ranging from paresis to complete paralysis. There was a linear relationship between motor damage and peripheral nerve dose.[30] In clinical situations such as this, where IO-EBT is relatively contraindicated, we are still able to deliver high local radiation doses on the order of 10,000-20,000 rad to these sites at the time of operation by means of intraoperative endocurietherapy (IO-ECT) techniques with permanent implantation of ^{125}Iodine seeds. High-dose endocurietherapy delivered continuously at a low dose-rate by means of permanent ^{125}Iodine appears to be better tolerated by structures which are sensitive to high-dose single-fraction IO-EBT, such as nerves, biliary tree, and blood vessels. This results from the differences of radiation effects on tissues when it is delivered at a low, continuous dose-rate over a period of months by ECT, compared to delivery in a large single fraction over a period of minutes by IO-EBT. Although this is only one example, in our clinical experience, we have found that applications of IO-ECT and IO-EBT are usually complimentary, since when it is not possible to give IO-EBT to an area, it is frequently possible to use IO-ECT, and vice versa. The decision whether to use IO-EBT or IO-ECT can best be made by the radiation onoclogist in the intraoperative suite at operation, since one cannot generally predict the outcome of a surgical tumor resection prior to operation.

So far, the major work in IO-EBT has been done by Abe and associates[31, 32] in Japan. By 1979, over 700 patients were treated in 26 Japanese intraoperative centers with either electron-beam or ^{60}Cobalt. Intraoperative radiotherapy used in a single dose of 2,800-4,000 rad without additional conventional external-beam radiotherapy was found to have a definite and favorable effect on locally advanced gastric cancer.[31] A single dose of more than 2,000 rad relieved pain within a week after intraoperative radiotherapy in 80% of treated patients with pancreatic cancers. Recanalization of the biliary tree was noted in 90% of 59 patients treated by IO-EBT for biliary cancer. A survival advantage was also seen. Anecdotal Japanese experience is available for treatment of unresectable primary colon cancers.[31] Matsumoto[33] reported a lower recurrence rate in 116 patients with superficial bladder cancers treated with IO-EBT combined with conventional external-beam photon radiotherapy. Abe treated 15 patients with incompletely resected soft tissue sarcomas, and a local control rate of 73% (11/15) was achieved after a single dose of 3,000-4,000 rad. Following complete tumor resection and intraoperative treatment of microscopic disease in the surgical bed, 21/28 patients with soft-tissue sarcomas survived, although follow-up is still short.[31]

Discussion

Our technique of intraoperative electron-beam therapy in use at the University of Nebraska Medical Center has three main advantages over techniques used at other intraoperative centers in the United States: 1) Our intraoperative facility is a dedicated unit, and the surgery is performed in the same suite that houses the linear accelerator. This eliminates the multiple problems that are encountered in other institutions where the operation and intraoperative electron beam therapy are done in separate buildings, or in separate rooms 2) The docking procedure is simplified because the treatment cone is fixed in position prior to docking, rather than being positioned by moving the head of the accelerator. This permits direct visualization of the area to be treated, and reduces the time required for docking. 3) The use of an electron beam allows more accurate dose localization in the AP direction, compared to intraoperative orthovoltage x-ray units now in use at institutions such as the Joint Center for Radiation Therapy (Harvard Medical School and New England Deaconess Hospital).[34] Whether the use of IO-EBT will result in improved local control and cure rates remains to be seen. However, the Japanese experience with over one thousand patients treated so far during the past 15 years with intraoperative radiotherapy has suggested a positive improvement. The morbidity produced by high-dose IO-EBT also appears acceptable.

Our clinical experience with interstitial ECT of different tumor types suggests that localized malignancies can be cured with minimum doses ranging from 8,000-10,000 rad.[8, 10, 11, 12, 15, 17] We are hopeful that high dose IO-EBT combined with conventional fractionated external-beam megavoltage photon irradiation will accomplish similar high local control rates.

Summary

The use of a dedicated intraoperative electron-beam suite at the University of Nebraska Medical Center has eliminated the problems encountered at other U.S. institutions where the operative suite and linear accelerator are in different locations. In this paper, we describe our intraoperative facility, and intraoperative technique. We review the current status of intraoperative radiotherapy in the United States and Japan, and discuss the indications and limitations of intraoperative radiotherapy.

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Pulmonary Function Abnormalities in Patients with Mitral Valve Prolapse

J. SHAHAR, M.D.,
W. E. GEORGE, M.D.,
A. N. MOOSS, M.D., F.C.C.P.,
W. J. O'DONOHUE, JR., M.D., F.C.C.P.*
Divisions of Pulmonary Medicine and Cardiology,
Department of Internal Medicine, Creighton University
School of Medicine, Omaha, Nebraska

PERSONS with mitral valve prolapse frequently have been found to have connective tissue abnormalities,[1] congenital thoracic deformities,[2,3] altered beta receptor function,[4,5] and exertional dyspnea.[6] One previous study reported that 63% of patients with mitral valve prolapse had increased residual volume and 50% had reduced carbon monoxide diffusing capacity.[7] Based on these data, it has been suggested that pulmonary elastic or connective tissues may be abnormal in these patients. The purpose of this study was to evaluate and define the type and incidence of pulmonary function abnormalities in nonsmokers with mitral valve prolapse, as well as to determine if dyspnea and chest wall abnormalities are related to pulmonary function test changes.

Material

We studied 30 subjects who were nonsmokers with documented mitral valve prolapse. There were 29 females and 1 male with mean age 35 years and a range from 21-55 years. All patients had typical echocardiographic evidence of mitral valve prolapse (by M-mode or two-dimensional echocardiography) and 27 of 30 patients had systolic click or click and murmur. They had no known respiratory disease and no other cardiovascular disorders. None were receiving beta blocking agents.

Methods

Each subject had a complete history and physical examination performed and a chest x-ray was obtained. Tests of pulmonary function included arterial blood gas analysis, lung volumes. spirometry, single breath carbon monoxide diffusion, closing volume, and static compliance of the lung by esophageal balloon insertion (successful in 24 of 30 subjects). All tests were performed using the Gould 1000 IV A Computerized Pulmonary Function Laboratory and the SRL Automated TMB pressure/volume plethysmograph, Model 8000.

Results

Clinical data, chest x-ray results and pulmonary function tests are shown in Table I. A history of dyspnea was present in 10 of the 30 subjects (33%). Ten of the 30 subjects had chest wall deformities, determined clinically or by chest x-ray or both, as described in Table I. Twenty-one subjects (70%) had completely normal pulmonary function tests. The other 9 subjects (30%) were found to have at least one abnormality in pulmonary function tests. All abnormalities were classified as mild and none were statistically significant.

The pulmonary function was abnormal in 4 of 10 subjects with dyspnea, with no consistent pattern of dysfunction observed. (Table 2) Pulmonary function in the 10 subjects with chest wall deformity was abnormal in 2 subjects. (Table 3) There were 12 subjects who had no dyspnea or chest wall deformity. In 3 of them the pulmonary function tests were abnormal. (Table 4)

Discussion

Patients with mitral valve prolapse frequently have dyspnea which is unrelated to identifiable heart or lung disease. Previous studies of pulmonary function have suggested that specific abnormalities may be present because of changes in the connective tissues of the lung.[1,7] The frequent occurrence of thoracic skeletal abnormalities might also be a cause for pulmonary dysfunction.

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*Reprint Requests: Walter J. O'Donohue, Jr., M.D., Division of Pulmonary Medicine, Department of Internal Medicine. 601 North 30th Street, Suite 3820, Omaha, NE 68131.

Table I
Patient Data

SUBJECT	SEX	AGE	DYSPNEA	CHEST WALL DEFORMITIES	SPIROMETRY*	LUNG* VOLUMES	DLCO*	CV/VC*	STATIC** COMPLIANCE
1	F	36	-	-	-	-	-	-	-
2	F	25	-	-	-	-	-	-	-
3	F	47	yes	scoliosis	-	-	-	-	not done
4	F	40	-	kypho-scoliosis	-	-	-	142	0.083
5	M	46	-	-	-	-	-	-	not done
6	F	30	-	-	-	-	-	-	-
7	F	55	-	straight back	-	-	-	-	-
8	F	24	-	probably Marfan's Syndrome	$FEF_{25-75}=58$	-	-	222	0.111
9	F	47	-	-	-	TLC = 78 RV = 59 FRC = 74	-	-	-
10	F	39	-	scoliosis	-	-	-	-	-
11	F	29	yes	-	-	-	-	-	0.310
12	F	40	yes	-	-	-	-	-	-
13	F	48	-	kypho-scoliosis	-	-	-	-	not done
14	F	40	yes	straight back	-	-	-	-	-
15	F	30	-	-	-	FRC = 76	73	-	not done
16	F	26	yes	-	-	-	-	-	-
17	F	34	-	-	-	TLC = 138 RV = 159	-	142	0.330
18	F	35	-	straight back	-	-	-	-	not done
19	F	29	-	-	-	-	-	-	-
20	F	38	-	straight back	-	-	-	-	-
21	F	24	-	-	-	-	-	-	-
22	F	31	-	kyphosis	-	-	-	-	-
23	F	33	yes	-	-	RV = 133	-	-	-
24	F	39	yes	-	-	-	-	-	-
25	F	21	yes	-	-	FRC = 62	-	-	-
26	F	42	yes	-	-	FRC = 70	-	-	-
27	F	25	yes	-	-	-	-	-	-
28	F	37	-	-	-	-	-	-	-
29	F	28	-	-	-	-	-	-	-
30	F	29	-	traumatic lesion of spine	-	-	-	-	not done

Normal values and negative findings are not listed. *Abnormal results appear as % of predicted. **Abnormal results appear as L/cm H20.

FEF_{25-75} = forced expiratory flow during the mid 50% of the exhaled volume; TLC = total lung capacity; RV = residual volume; FRC = functional residual capacity; DLCO = carbon monoxide diffusing capacity; CV/VC = closing volume.

In this study of 30 nonsmoking subjects there was at least one abnormality in the pulmonary function tests performed in 9 subjects (30%). No specific pulmonary function abnormality was identified, and all the abnormalities observed were characterized as mild. These findings differ from those previously reported where one-half of the patients were found to have decreased carbon monoxide diffusion and more than 60 percent had increased residual volume.[7] In our study carbon monoxide diffusion was mildly reduced in only one subject and residual volume was increased in only two.

The history of dyspnea, which was obtained

Table II

Pulmonary Function in Subjects With Dyspnea

TOTAL: 10 subjects (33%)

1. Normal Pulmonary Function: 6 subjects
   a. No chest wall deformity: 4 subjects
   b. Chest wall deformity: 2 subjects (scoliosis and straight back)

2. Abnormal Pulmonary Function: 4 subjects (no chest wall deformity)
   a. Increased static compliance: 1 subject
   b. Increased RV: 1 subject
   c. Reduced FRC: 2 subjects

Table III

Pulmonary Function in Subjects with Chest Wall Deformity

TOTAL: 10 subjects (33%)

1. Normal Pulmonary Function: 8 subjects

2. Abnormal Pulmonary Function: 2 subjects
   a. One subject: Decreased static compliance and increased CV/VC
   b. One subject: Reduced FEF 25-75' decreased static compliance, increased CV and possible Marfan's syndrome

Table IV

Pulmonary Function in Subjects with No Dyspnea or Chest Wall Deformity

TOTAL: 12 subjects (40%)

1. Normal Pulmonary Function: 9 subjects

2. Abnormal Pulmonary Function: 3 subjects
   a. One subject: Decreased FRC and decreased TLC
   b. One subject: Decreased FRC and decreased DLCO
   c. One Subject: Increased TLC, increased RV, increased CV/VC and increased static compliance.

from 33% of the subjects, is similar to that previously described in patients with mitral valve prolapse.[6] Chest wall deformities were identified in one-third of the subjects. This is slightly lower than previously observed.[2, 3]

The results of this study indicate that neither chest wall deformity nor dyspnea was accompanied by a significant increase in abnormal pulmonary function tests within the study group. This study also reconfirmed the previous observation that no significant correlation exists between dyspnea and chest wall deformities.[7] Studies of lung compliance, carbon monoxide diffusion and small airways function failed to demonstrate evidence of elastic or connective tissue dysfunction in the lungs.

Summary

Thirty nonsmokers with documented mitral valve prolapse underwent pulmonary function studies. Although nine subjects had at least one abnormality in pulmonary function tests, there were no specific pulmonary function abnormalities found within the group. All pulmonary function abnormalities observed were characterized as mild. There was no significant correlation between dyspnea and chest deformities and neither chest wall deformities nor dyspnea was accompanied by a significant increase in abnormal lung function.

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PERINATAL PAGE

Guidelines for Prevention and Management of Preterm Birth Part 1

DR. GILLES MONIF, Editor

WASHINGTON C. HILL, M.D., F.A.C.O.G.
Director, Perinatal Center Director, Maternal Fetal Medicine, Creighton University School of Medicine Omaha, Nebraska

PRETERM birth is defined as delivery between the 20th and 36th **completed** week of gestation. It accounts for at least 75% of perinatal deaths. Its occurrence is not only expensive, but emotionally traumatic to parents who undergo this experience. Preterm labor is difficult to diagnose. The diagnosis is most likely to be correct when regular uterine contractions are accompanied by progressive cervical dilatation and effacement within the above gestational range. Preterm birth occurs in 6-10% of pregnancies delivered after 20 completed weeks of pregnancy. Annually 250,000-300,000 preterm deliveries occur in the United States. Preterm birth is associated with 75-85% of neonatal deaths excluding those due to congenital anomalies. Recent studies have demonstrated the cost effectiveness of treatment for preterm labor between 26 and 33 weeks.

The best method to reduce the perinatal morbidity and mortality from preterm birth is to detect early preterm labor and utilize methods which will prevent preterm birth. This can be accomplished and requires: 1) better education of the patient and medical staff; 2) identification of the patients at risk; 3) frequent evaluation of the patient's cervix and presenting part; 4) the early detection of uterine activity; and 5) proper treatment of preterm labor with tocolytic therapy. This summary will briefly review the prevention and management of preterm birth.

Any effort to prevent preterm birth must include better education of the patient and medical staff. Patients have to be informed that frequent uterine contractions (> 4 in an hour) must be evaluated. The symptoms of preterm labor may be very subtle. Health care workers must be attuned to the fact that labor can not be diagnosed over the telephone and that patients who complain of uterine contractions, pelvic pressure, unusual low backache, menstrual-like cramps, and a change in their vaginal discharge must be evaluated for preterm labor.

Several authors have suggested methods of identifying patients at risk for developing preterm labor. These risk scoring systems can be utilized for determining the risk of a patient developing spontaneous preterm labor. Some of the factors which increase a patient's change of developing preterm labor are: uterine anomaly, placenta praevia, polyhydramnios, previous second trimester abortion, DES exposure, previous cone biopsy, previous preterm delivery, multiple gestations, repeated second trimester abortion, and abdominal surgery during current pregnancy. These systems have been found helpful in identifying patients who are at risk for preterm labor. Once a patient has been identified as at risk, there should be frequent evaluations of her cervic and presenting part. Several studies have shown the use of ultrasound to be helpful in predicting which patient may experience preterm labor. Funneling of the endocervical canal by the amniotic sac occurs in patients with not only imcompetent cervix, but in those who also may be preterm labor. Examining a patient's cervix vaginally for changes in effacement, dilation and the station of the presenting part will not increase the patient's risk of developing preterm labor and should be done periodically.

The early detection of uterine activity is most important in the prevention of preterm birth. Current evidence would suggest that asking patients to simply report increased uterine activity they perceive may not be the answer as patients may feel only 15-20% of their contractions. Preliminary results from several investigators using two different systems suggest home monitoring of uterine activity may be instrumental in the early and accurate detection of preterm labor and reccurent preterm labor. Further studies regarding this technique are in progress.

The proper treatment of preterm labor with tocolytic therapy is most important in the prevention of preterm birth. Two agents are currently being used to prevent preterm delivery: beta-adrenergic agents and magesium sulfate. In order for an obstetrician to expertly treat preterm labor, they must be familiar with these two agents. A complete discussion of their mechanism of action, dosage, administration, side effects, efficacy, fetal and neonatal effects is beyond the scope of this review, but will be discussed in Part 2 of this presentation.

The most significant problem deliverers of obstetrical care have to conquer in perinatal medicine is the prevention, management and treatment of preterm labor and delivery. Succeeding in this endeavor requires an integrated approach. Patients, nurses, health care workers, and physicians play an inportant role in this endeavor. Using these recommendations and practical considerations, we should be able to reduce preterm labor and prevent preterm birth.

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President's Page

CHALLENGES IN MEDICINE

We are in a very challenging time in medicine and I am optimistic that we can accept those challenges and continue to strengthen our organization.

The past two decades have been a period of rapid change in the delivery of health care. Historically, the members of our profession have always deemed that health care is the right of all the citizens of our country, and have offered that care, regardless of ability to pay.

With the implementation of medicare and Medicaid, and the introduction of government into medicine, that right has become extremely expensive to our citizens. There is evidence that while approximately 10% of the gross national product is being spent on health care, there are still over 3 million of the elderly at the bottom of the income scale that are receiving inadequate health care. A properly applied means test could be effective in controlling the rapidly expanding governmental health care costs. This would help the truly needy elderly patient without being a burden on the higher income group.

We must be concerned with the affordability accessability and quality of health care. Industry, in our free enterprise system, is turning to the alternative health care systems to control their costs. Predictions are that within the next decade, 90% of medical care will be through 3rd party systems. The rapid escalation in the field of HMO's, PPO's and IPA's is the result of efforts to assure accessability and affordability for people in the health care system. As physicians, we are concerned with the quality of that care. Physicians can be effective in the control of quality by working through the strength of our organization. Physicians can and should be instrumental in guiding policies so that we act in the best interest of our patients to assure them of quality health care. We can encourage plans that offer high quality care and hopefully, alter those that are detrimental to our patients. In the climate of cost-consciousness, it is only the physician who can assure that quality of health care is not compromised.

Hiram R. Walker, M.D.

With the managed health care programs and increasing government involvement, the autonomy of the physician has decreased. The changing pattern in patient-physician relationships has been accompanied by a startling rise in medical liability problems and the cost of liability insurance.

An example of the effectiveness of the efforts of physicians working through our organization is well demonstrated by the favorable medical liability legislation that was adopted in Nebraska in 1976. This came about through the expenditure of a tremendous amount of time and effort by relatively few members of our organization. This has been very beneficial in holding down health care costs for our patients. Continued cooperative efforts with our state legislators will be necessary to continue that favorable position in the medical liability field.

Another measure to help control costs is through the development and promotion of wellness programs to keep our patients healthy and productive. Fitness programs, instituted through the encouragement of physicians with industry, have proven to be effective in avoiding the high costs of self-inflicted illness associated with poor health habits.

The shortage of physicians that existed in the 70's has largely been corrected, with the possible exception of a few of the rural areas.

With an adequate supply of physicians, more time can be spent with the patients, thus improving the patient-physician relationship. Also, we will have more time to share with our families, which will enrich our lives and help us better serve both ourselves and our patients.

Accepting these challenges, we can continue to best serve our patients through our chosen profession.

It has been said that "life is like an onion — we live it by peeling of a layer at a time and sometimes we cry a little between the layers."

Hiram R. Walker, M.D.
President

The Auxiliary

CONVENTION 1986

The 61st meeting of the Nebraska Medical Association Auxiliary was held at the Marriott Hotel in Omaha, Nebraska, April 25-27, 1986.

Thirty auxilians attended the annual meeting, chaired by Ardis Grace, on Friday, April 25. Special guests were Jean Cavanaugh and Mrs. Hull Cook. Jean Cavanaugh is our National Vice-President of the North Central Region of the AMAA. Mrs. Cook is the wife of Hull Cook, who is being honored as a 50 year practitioner at this meeting.

A luncheon, attended by 35, was held in the Lincoln Suite at the Marriott. Following was a seminar entitled "A View from Age: Try to see it their way." Jane F. Potter, M.D., Chief - Section of Geriatrics and Gerontology, Department of Internal Medicine, UNMC, conducted the seminar, and answered a lot of questions for her most interested audience.

Friday evening found 25 auxilians enjoying dinner at the home of Mrs. Daniel Bohi, who is a fellow auxilian. Our sincere thanks go out to her and Jan Haggstrom for arranging this lovely affair, and to MOMSA Auxiliary for being our hostess. Jeannine Schulz, President of the Iowa Auxiliary, was a guest along with Jean Cavanaugh.

Sixty auxilians attended the Annual Brunch, which opened with Barbara Dinsdale leading devotions, and then accompanying Helen Krause who sang "How Great Thou Art". What a lovely way to start the meeting, and we thank these ladies for sharing their talent with us. The setting for the Brunch was the Omaha Country Club.

Mrs. Clair Cavanaugh (Jean) was the guest speaker at the brunch. Jean is from Great Bend, Kansas. She was elected North Central Regional Vice President at the 1985 Annual Session of the House of Delegates. She was previously a director, chairman of the AMA-ERF Committee, and a member of the Long Range Planning and Nominating Committees. Jean installed the new officers who are: president, Mrs. Robert Kruger (Bev) of Omaha; president-elect, Mrs. George Adam (Colleen) of Hastings; first vice president, Mrs. Robert Osborne (Desta) of Lincoln; second vice president, Mrs. William Becker (Sally) of Norfolk; treasurer, Mrs. William Schlichtemeier (Jeannette) of Omaha. Mrs. Stanley Mountford (Gerry) of Omaha and Mrs. Edward Holyoke (Sharon) of Ogallala were elected for a 2 year term as directors. Jean made the installation of each person a very personal thing. Her message to everyone was to volunteer and be leaders in our communities. Jean took time to visit with everyone and had a lot of good suggestions. We truly enjoyed having her in Nebraska, and found out she is just like us.

The highlight of the Brunch was having Mrs. Larry Fletcher (Peg) be chosen for the "Merit

Award" and Mrs. William Becker (Sally) be named "Woman of the Year". How thrilling to listen to their achievements, and how proud we are of both of them.

Our busy AMA-ERF Chairman, Donna Stone, announced that $7,079.07 has been raised during the year. Lancaster County won the award for the largest amount raised, $3,078. Burt-Washington won first place for having the highest per capita amount ($31.39); Southwest won second with $22.72 per capita, and Lincoln County won third with $20.44 per capita.

Sally Becker announced that Northeast Nebraska had the most per capita and Lancaster the largest donation for NMF.

The Presidential award, presented by Ardis Grace, went to Lincoln County. Lincoln County has really "come alive" under the direction of President Molly O'Holleran.

What a joy it was to have 13 Gavel Club members in attendance showing their support.

It was indeed a privilege to hand on the gavel to my dear friend and your new president, Bev Kruger.

On Sunday morning April 27, immediate past president, Ardis Grace, presented the AMA-ERF checks to the two medical schools, and addressed the House of Delegates telling about the 1985-86 auxiliary year.

Kay Reed, Health Gallery Chairperson, could be seen throughout the convention selling lottery tickets. The total was nearing $4,000, so her time has been well spent. We congratulate her, and thank the Lancaster auxilians and Ken and Bill for their help.

I feel that my theme of HEALTH FOR THE WHOLE FAMILY has been carried out this year, thanks to Shirley Johnson and her committee.

I would like to extend a special thanks to the convention chairman, Barb Bohi, and her co-chairman Jan Haggstrom, to Gerry Mountford and MOMSA, to Ken Neff and William Schellpeper and the NMAA office persons, and all of the committees that helped to make the 61st annual session a good one.

Bev Kruger, NMAA President, and Hiram Walker, NMA President, were honored at the Inaugural Banquet on Sunday evening. Harrison L. Rogers, Jr., M.D. of Atlanta, Georgia was the speaker with "Future Directions of Health Care" as his subject.

Being president of the Nebraska Medical Association Auxiliary has been my privilege, and I thank you for it.

Respectfully,
Ardis Grace
Immediate Past President

LETTERS TO THE EDITOR

Dear Dr. Forker:

I would like to echo the warning by Doctors Woytassek and Atwal (November, 1985 issue) concerning the potential dangerousness of patients with Capgras Syndrome. For two years I have followed a group of fifty chronic schizophrenic patients at the Missouri state psychiatric maximum security facility. Three of the fifty patients have, at some time, manifested symptoms of the Capgras delusion, the belief that imposters have replaced acquaintances. Two have killed persons, both brutally. One of these patients bludgeoned and then decapitated his 82 year old stepfather after quarreling with him about the need for the patient's hospitalization. For several weeks prior to the incident, the patient had complained that his stepfather and other close family members were clones and robots. After decapitating his stepfather, he expained that he had been searching for batteries and microfilm in his head to take to court to prove he was a robot. Like Doctors Woytassek and Atwal's patient, my patient demonstrated no evidence of organic pathology and was found "not guilty by reason of mental disease or defect".

Sincerely,
Gary Blount, M.D.
Senior Resident and Clinical Instructor in Psychiatry
University of Missouri — Columbia

Dear Dr. Forker:

I am writing in response to the editorial "Business of Medicine Versus Medicine as a Business" that appeared in the April, 1986 issue of the Nebraska Medical Journal. The word "medicine" is defined by Dorland's Medical Dictionary as "the art and science of the diagnosis and treatment of disease and maintenance of health." Now, mine is the 25th Edition. Perhaps a more current edition will define medicine as "the art and science and **business** of the diagnosis and treatment of disease and the maintenance of health." But if this happens, I submit that it will be the fault of you and me and all the other doctors in practice today — that this travesty will have occurred because of what we did or did not do to keep ourselves worthy to practice this hallowed profession. We shall all see soon enough that medicine, which is the finest of professions, will be the worst of businesses. In these turbulent and changing times, we must look to our historic models and our mentors. How, for example, would Jesus (who was a healer and who is a model for many of us) look upon this matter of the "business of medicine?" And how would Sir William Osler square the high principles of our beloved profession with "the efforts of the entrepreneurs in constricting the size and utilization of the traditional health care model (which have) so far resulted in one-third of every health care dollar moving to Wall Street, the equity market?"

Sincerely,
David J. Harter, M.D.

Picture Gallery

NEBRASKA MEDICAL
ASSOCIATION

1986
Annual Session

Howard A. Dinsdale, M.D. presiding at Nebraska Foundation annual Board of Directors' meeting.

Dr. Stanley M. Truhlsen presiding at the Board of Councilors' meeting.

Dr. Herbert E. Reese presiding at the Honors Luncheon.

NMA Board of Councilors

Honors Luncheon

NMA Board of Councilors

Honors Luncheon

Honors Luncheon

Dr. Harry W. McFadden presiding at the House of Delegates' meeting.

Dr. Hiram R. Walker presenting 50-year certificate to Dr. Charles M. Coe.

Dr. Hiram R. Walker presenting 50-year certificate to Dr. Maurice Lewis Pepper.

Dr. Hiram R. Walker presenting 50-year certificate to Dr. Hull A. Cook.

Dr. Hiram R. Walker presenting 50-year certificate to Dr. John O. Milligan.

50-Year practitioners: Dr. Maurice Lewis Pepper, Dr. Hull A. Cook, Dr. John O. Milligan, Dr. Herbert D. Kuper, and Dr. Charles M. Coe.

Dr. Herbert E. Reese presenting the necrology.

Dr. Robert H. Waldman addressing the House of Delegates.

Dr. Gregg F. Wright addressing the House of Delegates.

Greg Miller presenting an award to Dr. Robert Binhammer from the University of Nebraska Medical Center.

House of Delegates Reference Committee.

House of Delegates Reference Committee.

House of Delegates Reference Committee.

House of Delegates Reference Committee.

House of Delegates Reference Committee.

House of Delegates Reference Committee.

Mrs. Ardis Grace addressing the House of Delegates.

Dr. Howard A. Dinsdale presenting Nebraska Medical Foundation Student Research Scholarship check to Tim Hollingsed, University of Nebraska College of Medicine.

Dr. Howard A. Dinsdale presenting Nebraska Medical Foundation Student Research Scholarship check to Mark Gates, Creighton University School of Medicine.

Dr. Jon Thompson, Tim Hollingsed, NMF Scholarship Recipient, and Dr. Howard A. Dinsdale, President, Nebraska Medical Foundation.

Mark Gates, NMF Scholarship Recipient, Dr. Christine Sanders, and Dr. Howard A. Dinsdale, President, Nebraska Medical Foundation.

Dr. Thomas H. Wallace presenting Reference Committee report.

Dr. Allan C. Landers presenting Reference Committee report.

Dr. Richard H. Meissner presenting Reference Committee report.

Dr. James H. Dunlap presenting Reference Committee report.

Dr. Alan D. Forker presenting Reference Committee report.

Dr. Frederick F. Paustian presenting Reference Committee report.

Dr. Harrison L. Rogers, Jr., President, American Medical Association, addressing the House of Delegates.

Dr. Hiram R. Walker addressing the House of Delegates.

Dr. C. A. McWhorter presenting Nominating Committee report.

Dr. Paul E. Collicott escorting 1986-87 President-Elect, Dr. L. Dwight Cherry to the podium.

Dr. Francis D. Donahue presenting Dr. L. Dwight Cherry with President-Elect badge.

Dr. L. Dwight Cherry addressing the House of Delegates.

Dr. Harrison L. Rogers, Jr. congratulating Dr. L. Dwight Cherry.

1986 Inaugural Banquet.

1986 Inaugural Banquet.

1986 Inaugural Banquet.

1986 Inaugural Banquet.

Dr. Perry T. Williams presiding at the Inaugural Banquet.

Dr. Francis D. Donahue and Dr. Harrison L. Rogers, Jr. at the Inaugural Banquet.

Dr. Francis D. Donahue presenting President's badge to Dr. Hiram R. Walker.

Dr. Francis D. Donahue presenting Gavel to Dr. Hiram R. Walker.

Dr. Francis D. Donahue presenting President's Medallion to Dr. Hiram R. Walker.

Dr. Francis D. Donahue presenting "It's Only a Pumpkin" plaque to Dr. Hiram R. Walker.

Dr. Hiram R. Walker presenting Past President's badge to Dr. Francis D. Donahue.

Dr. Hiram R. Walker addressing the Inaugural Banquet.

Dr. Harrison L. Rogers, Jr., AMA President, addressing the Inaugural Banquet.

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"High blood pressure should be a red flag to screen for cholesterol..."[1]

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If your patients have hypertension, they probably have high cholesterol too.

The Framingham Heart Study[2] showed that over two thirds of the 35 and older population in that study with systolic blood pressures over 145 mmHg also had serum cholesterol levels of 225 mg/dL or more, and 46% had levels above 250 mg/dL.

While many clinical laboratories still report 250 mg/dL as "normal" cholesterol, the NIH Consensus Development Conference Statement on Cholesterol and Heart Disease[3] stated that any level above 220 mg/dL is associated with a significantly increased risk of coronary heart disease.

You need to know, because high cholesterol parallels high blood pressure as a CHD risk factor.

Epidemiological studies and large-scale prevention trials have indicated that as with blood pressure, serum cholesterol levels are proportionately related to CHD risk. Specifically, *"...for every 10 mmHg rise in pressure, there appears to be about a 30% rise in cardiovascular risk."*[4] *"...for every one percent you go up the American cholesterol scale, your subsequent rate of heart attack rises two to three percent."*[5]

And although the specific impact on CHD has not been determined, we know that many of the principal agents used to lower blood pressure actually increase cholesterol.

Wytensin® lowers blood pressure effectively without raising cholesterol.

While Wytensin is not a cholesterol-lowering agent and is not indicated for the treatment of hyperlipidemia, in controlled clinical trials[6] it caused a slight, sustained decrease in total cholesterol without reducing the HDL fraction or altering serum triglycerides.

At the same time, Wytensin lowered blood pressure as effectively as hydrochlorothiazide, propranolol, clonidine or methyldopa. Drowsiness and/or dry mouth, the most frequent side effects noted with Wytensin, usually diminish or disappear over time. In fact, in double-blind studies to date, discontinuance of therapy for all side effects occurred in about 13% of patients.

WyTensin®
(guanabenz acetate)

Antihypertensive therapy that does not increase cholesterol

See important information on following page.

References: 1 Glueck CJ: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 2. *The Framingham udy. An epidemiological investigation of cardiovascular disease*, Section 28, U.S. Dept. of Health, Education, and Welfare. 3. National Institutes of Health Consensus Development Conference Statement, 1984: Vol 5, No 7, p 4. 4. Chobanian AV: The influence of hypertension and other hemodynamic factors in atherogenesis. *Progress in Cardiovascular Diseases, XXVI* (3): 177, Nov/Dec, 1983. 5. Castelli WP: Remarks in the symposium, *Blood Pressure, Cholesterol and Coronary Heart Disease*, Washington, D.C., March 31, 1985. 6. Data on file, Wyeth Laboratories.

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WyTensin®
(guanabenz acetate)

Antihypertensive therapy
that does not increase cholesterol

Brief Summary

Before prescribing, consult the complete package circular.

Indications and Usage: Treatment of hypertension, alone or in combination with a thiazide diuretic

Contraindication: Known sensitivity to the drug.

Precautions: 1. Sedation Causes sedation or drowsiness in a large fraction of patients When used with centrally active depressants, e g , phenothiazines, barbiturates and benzodiazepines, consider potential for additive sedative effects. 2 Patients with vascular insufficiency Like other antihypertensives use with caution in severe coronary insufficiency, recent myocardial infarction, cerebrovascular disease, or severe hepatic or renal failure 3 Rebound: Sudden cessation of therapy with central alpha agonists like **Wytensin** may rarely result in "overshoot" hypertension and more commonly produces increase in serum catecholamines and subjective symptomatology.

INFORMATION FOR PATIENTS. Advise patients on **Wytensin** to exercise caution when operating dangerous machinery or motor vehicles until it is determined they do not become drowsy or dizzy Warn patients that tolerance for alcohol and other CNS depressants may be diminished. Advise patients not to discontinue therapy abruptly

LAB TESTS. In clinical trials, no clinically significant lab test abnormalities were identified during acute or chronic therapy. Tests included CBC, urinalysis, electrolytes, SGOT, bilirubin, alkaline phosphatase, uric acid, BUN, creatinine, glucose, calcium, phosphorus, total protein, and Coombs' test. During long-term use there was small decrease in serum cholesterol and total triglycerides without change in high-density lipoprotein fraction In rare instances occasional nonprogressive increase in liver enzymes was observed, but no clinical evidence of hepatic disease.

DRUG INTERACTIONS **Wytensin** was not demonstrated to cause drug interactions when given with other drugs, e g , digitalis, diuretics, analgesics, anxiolytics, and antiinflammatory or antiinfective agents, in clinical trials However, potential for increased sedation when given concomitantly with CNS depressants should be noted.

DRUG/LAB TEST INTERACTIONS. No lab test abnormalities were identified with **Wytensin** use

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY. No evidence of carcinogenic potential emerged in rats during a two-year oral study with **Wytensin** at up to 9.5 mg/kg/day, i.e , about 10 times maximum recommended human dose In the Salmonella microsome mutagenicity (Ames) test system, **Wytensin** at 200-500 mcg per plate or at 30-50 mcg/ml in suspension gave dose-related increases in number of mutants in one (TA 1537) of five *Salmonella typhimurium* strains with or without inclusion of rat liver microsomes No mutagenic activity was seen at doses up to those which inhibit growth in the eukaryotic microorganism, *Schizosaccharomyces pombe*, or in Chinese hamster ovary cells at doses up to those lethal to the cells in culture In another eukaryotic system, *Saccharomyces cerevisiae*, **Wytensin** produced no activity in an assay measuring induction of repairable DNA damage. Reproductive studies showed a decreased pregnancy rate in rats given high oral doses (9.6 mg/kg), suggesting impairment of fertility Fertility of treated males (9.6 mg/kg) may also have been affected, as suggested by decreased pregnancy rate of mates, even though females received drug only during last third of pregnancy.

PREGNANCY Pregnancy Category C WYTENSIN® MAY HAVE ADVERSE EFFECTS ON FETUS WHEN ADMINISTERED TO PREGNANT WOMEN. A teratology study in mice indicated possible increase in skeletal abnormalities when **Wytensin** is given orally at doses 3 to 6 times maximum recommended human dose of 1.0 mg/kg These abnormalities, principally costal and vertebral, were not noted in similar studies in rats and rabbits However, increased fetal loss has been observed after oral **Wytensin** given to pregnant rats (14 mg/kg) and rabbits (20 mg/kg) Reproductive studies in rats have shown slightly decreased live-birth indices, decreased fetal survival rate, and decreased pup body weight at oral doses of 6.4 and 9.6 mg/kg There are no adequate, well-controlled studies in pregnant women **Wytensin** should be used during pregnancy only if potential benefit justifies potential risk to fetus

NURSING MOTHERS Because no information is available on **Wytensin** excretion in human milk, it should not be given to nursing mothers.

PEDIATRIC USE. Safety and effectiveness in children less than 12 years of age have not been demonstrated, use in this age group cannot be recommended.

Adverse Reactions: Incidence of adverse effects was ascertained from controlled clinical studies in U.S and is based on data from 859 patients on **Wytensin** for up to 3 years There is some evidence that side effects are dose-related Following table shows incidence of adverse effects in at least 5% of patients in study comparing **Wytensin** to placebo, at starting dose of 8 mg b i d

Adverse Effect	Placebo (%) n = 102	**Wytensin** (%) n = 109
Dry mouth	7	28
Drowsiness or sedation	12	39
Dizziness	7	17
Weakness	7	10
Headache	6	5

In other controlled clinical trials at starting dose of 16 mg/day in 476 patients, incidence of dry mouth was slightly higher (38%) and dizziness was slightly lower (12%), but incidence of most frequent adverse effects was similar to placebo-controlled trial Although these side effects were not serious, they led to discontinuation of treatment about 15% of the time In more recent studies using an initial dose of 8 mg/day in 274 patients, incidence of drowsiness or sedation was lower, about 20% Other adverse effects reported during clinical trials but not clearly distinguishable from placebo effects and occurring with frequency of 3% or less Cardiovascular—chest pain, edema, arrhythmias, palpitations Gastrointestinal—nausea, epigastric pain, diarrhea, vomiting, constipation, abdominal discomfort Central nervous system—anxiety, ataxia, depression, sleep disturbances ENT disorders—nasal congestion Eye disorders—blurring of vision Musculoskeletal—aches in extremities, muscle aches Respiratory—dyspnea Dermatologic—rash, pruritus Urogenital—urinary frequency, disturbances of sexual function Other—gynecomastia, taste disorders

Drug Abuse and Dependence: No dependence or abuse has been reported

Overdosage: Accidental ingestion caused hypotension, somnolence, lethargy, irritability, miosis, and bradycardia in two children aged one and three years Gastric lavage and pressor substances, fluids, and oral activated charcoal resulted in complete and uneventful recovery within 12 hours in both Since experience with accidental overdosage is limited, suggested treatment is mainly supportive while drug is being eliminated and until patient is no longer symptomatic Vital signs and fluid balance should be carefully monitored Adequate airway should be maintained and, if indicated, assisted respiration instituted No data are available on **Wytensin** dialyzability

Dosage and Administration: Individualize dosage A starting dose of 4 mg b i d is recommended, whether used alone or with a thiazide diuretic Dosage may be increased in increments of 4 to 8 mg/day every one to two weeks, depending on response Maximum dose studied has been 32 mg b i d , but doses this high are rarely needed

How Supplied: (guanabenz acetate) Tablets, 4 mg, bottles of 100 and 500, 8 mg and 16 mg, bottles of 100 Revised 2/14/85

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Ad Council

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2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
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6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia."

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Coming Meetings

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

CURRENT TREATMENT OF VENTRICULAR ARRHYTHMIAS TO PREVENT SUDDEN DEATH — June 6, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. Guest speakers John Fisher, Montefiore Medical Center, New York, E. Neil Moore, D.V.M., University of Pennsylvania, Philadelphia and Joel Morganroth, M.D., Hahnemann University, Philadelphia. (6 credit hours)

CURRENT CONCEPTS IN NEUROLOGY — June 13-14, 1986, Center for Continuing Education, University of Nebraska Medical Center, Omaha. A practical neurology program designed for the primary care physician. (12 credit hours)

TETONS PEDIATRIC CONFERENCE — June 29-July 3, 1986, Jackson Role Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Pediatrics. Subjects to include Ophthalmology, General office pediatrics and gastroenterology. Guest speaker: Joan Hodgman, M.D., USC School of Medicine, Neonatologist. (17¼ credit hours)

TETONS SPORTS MEDICINE CONFERENCE—July 7-10, 1986, Jackson Hole Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Orthopaedic Surgery and Rehabilitation. Division of Sports Medicine. Guest speakers: Oded Bar-Or, M.D., Director of Children's Exercise and Nutrition Center, McMaster University, Hamilton, Ontario, Canada; John A. Feagin, M.D., President, American Orthopaedic Society for Sports Medicine (20 credit hours).

EMERGENCY MEDICINE REVIEW— September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

ADVANCED TRAUMA LIFE SUPPORT — September 15-16, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

EMERGENCY MEDICINE REVIEW— Octtober 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

ADVANCED TRAUMA LIFE SUPPORT — November 3-4,. 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

LINCOLN GENERAL HOSPITAL

FIFTH ANNUAL CORNHUSKER/CANADIAN CLINICAL CONFERENCE — June 22-27, 1986. Lynn Lake, Manitoba, Canada. Fee: $150.00. For information, contact: Cathy Kinnaman, RN, Education and Staff Development, Lincoln General Hospital, 2300 South 16th Street, Lincoln, NE 68502, (402) 473-5638.

CREIGHTON UNIVERSITY

UPDATE IN INFECTIOUS DISEASES AND ENDOCRINOLOGY — May 17-31. Scandinavia Study/Tour — Co-sponsored with University of Wisconsin and Tulane Medical Center. Fee $400. 36 Hours.

FAMILY MEDICINE UPDATE — May 23-25. The Lodge at Okoboji, Iowa — Fee TBA. 15 Hours.

MAURICE GRIER SYMPOSIUM (OB/GYN) — June 7. Marriott Hotel, Omaha, Nebraska — Fee TBA. 5 Hours.

GI MEDICAL/SURGICAL UPDATE — June 16-30. Germany Study/Tour — Co-sponsored with University of Wisconsin and Tulane Medical Center — Fee $400. 37 Hours.

CALCIUM ANTAGONIST AND ARRHYTHMIAS — June 28. Marriott Hotel, Omaha, Nebraska — Fee TBA. Hours TBA.

OFFICE PRACTICE AND MANAGEMENT IN THE 90'S — July 26-August 2, Vail Racquet Club, Vail, Colorado — Fee TBA. Hours TBA.

FAMILY MEDICINE UPDATE — August 29-30. The Lodge at Okoboji, Okoboji, Iowa — Fee TBA. 10 Hours.

FINE NEEDLE ASPIRATION BIOPSY — Sept. 6. Holiday Inn Central, Omaha, Nebraska — Fee $75.00. 3 Hours.

CARDIOLOGY/RHEUMATOLOGY UPDATE — Sept. 18-30. Ireland Study/Tour in cooperation with Trinity College and University College: Co-sponsored with University of Wisconsin and Tulane Medical Center — Fee $400. 36 Hours.

A DAY WITH THE PERINATOLOGISTS — Sept. 20. Marriott Hotel, Omaha, Nebraska — Fee TBA. Hours TBA.

MEDICINE IN THE NINTIES — Oct. 11-17. U.S. Grant Hotel, San Diego, California — Fee TBA. Hours TBA.

OMAHA MID-WEST CLINICAL SOCIETY — Oct. 27-29. Red Lion Inn, Omaha, Nebraska — Fee $160. 23 Hours.

1987

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17. Wyndiam Rose Hall Hotel, Montego Bay, Jamaica — Fee TBA. Hours TBA.

ROSE MEDICAL CENTER

"Ethics on the Front Lines of Medical Care: NON-NATURAL DEATH — Coming to Terms with Suicide, Euthanasia, Withholding or Withdrawing Treatment" — June 25-27. Sponsored by Applied Biomedical Ethics at Rose Medical Center with the American Association of Suicidology as a cooperating co-sponsor. For further information call 303-320-2895.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

FIFTH ANNUAL SUMMER MEDICAL SYMPOSIUM: "MEDICINE FOR THE PRACTICING PHYSICIAN"—July 10-13, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education and the University of Kansas School of Medicine, Wichita, KS 67214. Location: Broadmoor Hotel, Colorado Springs, CO. Credit: 15 hrs., AMA Cat 1. Fee: $375.00.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

SCHEDULED MEETINGS

PREPREGNANCY RISK IDENTIFICATION AND REDUCTION — June 5 and 6. Sponsored by the Nebraska Department of Health. To be held at the East Campus Student Union, Lincoln. Plenary session speakers include James Hanson, M.D., Bruce A. Buehler, M.D., Kay Johnson, M.P.H., M.Ed., Betty Caan, Dr. P.H., Judy Capra, M.A., Howard Schwartz, M.D., Yvonne Green, R.N., C.N.M., and Judith Roepke, R.D., Ph.D. The purpose of the program is to explore and define preconception risk identification and reduction as strategies for reducing the infant mortality rate and the incidence of low birthweight. Registration fees are $25 for the two day conference. Continuing education credits have been applied for. For more information contact: Nutrition Division, Nebraska Department of Health, 402-471-2781. Preregistration deadline is May 23, 1986.

"MEDICAL TECHNOLOGY ASSESSMENT FOR HEALTH PROFESSIONALS" — June 16-20, 1986. Offered by faculty of the Sloan School of Management and visiting faculty as part of the 1986 MIT Summer Session. Continuing medical education credit for the program offered by the Office of Continuing Medical Education at Tufts University School of Medicine. A detailed description of the program is available upon request from the Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge, MA 02139.

AMA News Notes

The Advisory Committee On Public Awareness presented its report to the board, which announced that it would deliberate on the committee's recommendations and create its own report. Both the Advisory Committee report and the Board's report will go to the House of Delegates.

In An Interview In American Medical News (AMN), incoming AMA President John J. Coury Jr., M.D., spoke on a broad range of topics. Here are some of his comments:

"I have only one main theme that I will be making to physicians," Dr. Coury says, "and that is that we cannot let down on the quality of medical care. That's a physician's major purpose in life — to provide high-quality medicine. We have to strive to keep quality up in the face of the bottomline pressures being brought against us by business and governments. Right now, the debate between quality care and the bottom-line mentality is pretty intense. The AMA has always been in favor of cost-effective medicine, but there is a limit to how far you can shave costs without endangering quality. Right now, we are pushing those limits to the edge, and the quality physician and the quality hospital will become endangered species unless we can persuade the public to push the pendulum back. The current efforts to limit cost are penny-wise and pound-foolish."

He explains: "Third-party payers are mandating things like having all breast biopsies and all hernias done on an outpatient basis. Well, when you mandate how the physician must practice medicine, you increase the possibility of risk to the patient, including complications, even death. AMA is saying to the third-party payers: 'Enough is enough!' When corporations and governments begin to try to hire physicians and then tell them how to practice medicine, it is time for AMA to resist."

Dr. Coury is optimistic, however. "The emphasis today is on holding down cost," he says, "but the pendulum will swing back. That's because the public will demand it. Back in the 1930s and 1940s, we were told that American medicine would soon be socialized. The same thing happened in the early 1970s. Well, American medicine is still free. It's always been a peak-and-valley type of thing."

The complete text of Dr. Coury's comments can be found in the May 16, 1986, issue of **AMN.**

* * *

By Slowing Down Medicare Claims Payments, the government can earn an additional $130 million a year in interest on the Medicare trust funds, HCFA officials testified to the House Ways and Means health subcommittee. Rep. Willis Gradison Jr., (R., Ohio) said he may introduce legislation to require the government to pay interest when payment time exceeds 45 days. AMA representative William R. Felts, M.D., said payments in many areas are already much slower than that. Dr. Felts, M.D., also warned that slow payments could discourage physicians from taking assignment.

* * *

The Federal Aviation Administration (FAA) Has Accepted a comprehensive AMA review of medical standards for civilian airmen. The FAA said the report, to be considered by the agency in revising current standards, probably will be published in the Federal Register for comment. Several years will be required to complete the standards revision process. Current FAA standards were promulgated in 1959. There were some revisions in 1982.

The AMA report was two years in the making and involved contributions by 13 expert panels under the direction of Alan L. Engelberg, M.D., director of the AMA's Dept. of Public Health policy. It recommends some major changes in the medical standards used to certify civilian pilots. A copy of the report is available by calling Dr. Engelberg at (312) 645-4534.

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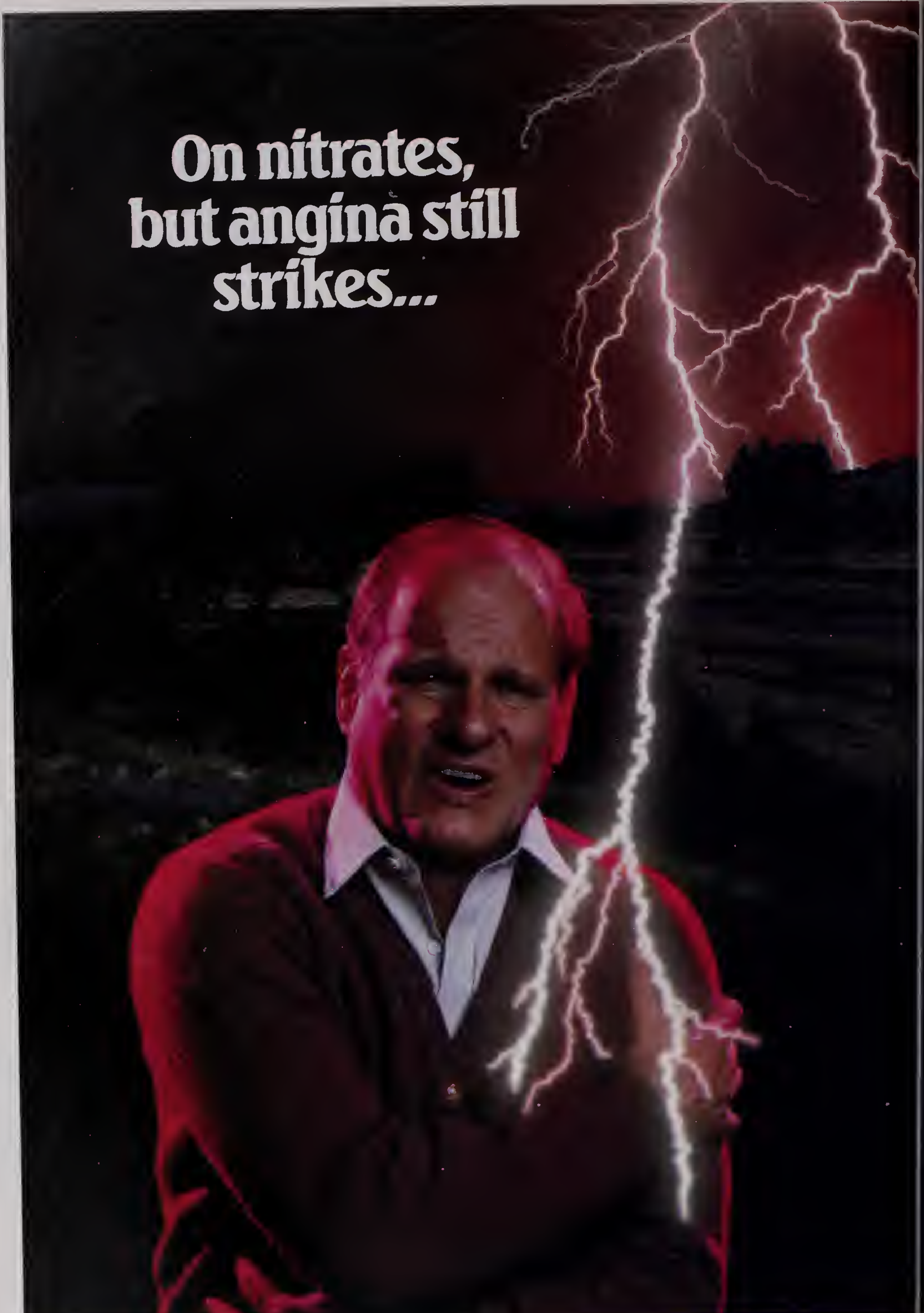
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Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction < 30% or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.*) Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions.*) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings.*) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984. 2385

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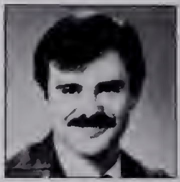

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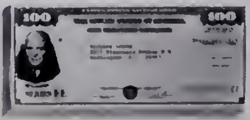

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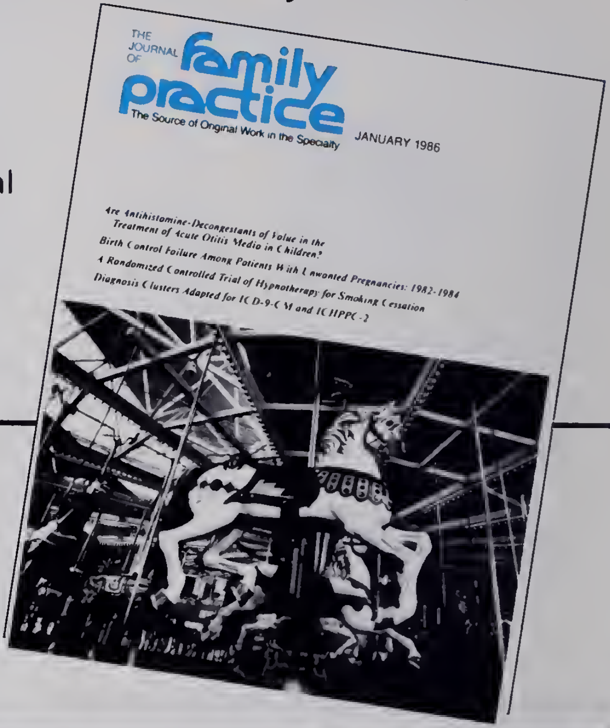
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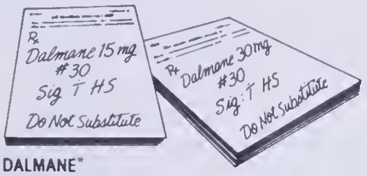

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AMA News Notes

(Continued from page 254)

about AIDS from their patients and from the public," Dr. Hendee says.

The first four locations of the prototype seminars, and the dates they will be held are: Harrisburg, Penn., June 4; Chicago, June 9; San Francisco, June 18; and Austin, Texas, June 25. Each seminar will be run by an AMA teaching team lead by Robert Rinaldi, Ph.D. By the end of the summer, the AMA hopes to have the program in place in each of those four states. Then, by the end of 1986, plans call for several large regional seminars based on the experience gained from the prototypes.

* * *

Sen. Daniel Inouye (D, Hawaii), one of the Senate sponsors of the AMA's professional liability bill, S 1804, has sent a "Dear Colleague" letter to members of the Senate urging them to become co-sponsors of the measure. He said demonstration of such support was needed to spur chances for the Hatch-Lent bill to be reported out before the 99th Congress adjourns.

"It is becoming increasingly evident that the Congress must act aggressively to address the issue of professional liability/medical malpractice in a comprehensive fashion," Inouye said. His letter noted that costs of defensive medicine to validate a clincial judgment had been estimated at $9 billion annually — from 20% to 25% of the total amount spent on physician's services. Inouye cited the AMA's statement that 70% of the nation's physicians have indicated that they have altered the way they practice to protect themselves against lawsuits.

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AMA News Notes

In The Aftermath Of The Chernobyl Nuclear Power Plant Disaster, the AMA has formed a new committee to address the health problems associated with non-military radiation incidents, emergencies, and accidents. The Advisory Committee on Non-military Radiation Emergencies will guide organizational activities at the state and local levels, as well as serving as a body of expertise at the national level.

Among observations developed at an initial meeting of the seven-member panel last month:

— Health and medical effects, rather than engineering and technical problems, are of primary concern to the public.

— Management of radiation emergencies involves treatment of physical and emotional damage to human beings.

— An almost complete absence of physician involvement in planning presently exists.

— Physicians have not been organized on a local, regional, national, or international basis to respond to the need for information on radiation effects on a voluntary basis, nor are physicians appropriately utilized by government agencies responding to the need for public information.

"Many physicians are knowledgeable about how to respond to radiation emergencies, and others have adequate training to help assess the health consequences of radiation incidents," said committee Secretary William R. Hendee, PhD, AMA vice president for science and technology. "The desired level of physician involvement would lead to a reasonable professional and public understanding of non-military radiation incidents and emergencies."

The advisory committee recommended developing an action plan that would increase physician involvement at the community level, through state and county medical societies, and improve national recognition of physicians as expert resources for government agencies and the media. Among suggestions:

— State and county medical societies assist hospitals in developing emergency response plans.

— The AMA provide information packets to state and county medical societies.

— State and county medical societies advise the media, civic organizations, government agencies, and educational groups of the availability of experts to address health aspects of radiation incidents.

— The AMA advise federal and state governments of the need for physician input.

— Medical societies convene local groups of experts to develop planning and communications activities.

In addition to Dr. Hendee, committee members include: Gordon K. MacLeod, MD, U. of Pittsburgh, chairman; David Brill, MD, Geisinger Medical Center, Danville, Pa.; David V. Becker, MD, New York Hospital-Cornell Medical Center; Eugene L. Saenger, MD, U. of Texas Health Science Center, Dallas; Merle K. Loken, MD, PhD, U. of Minnesota Hospital, Minneapolis; and Henry Wagner, MD, Johns Hopkins U. School of Medicine, Baltimore.

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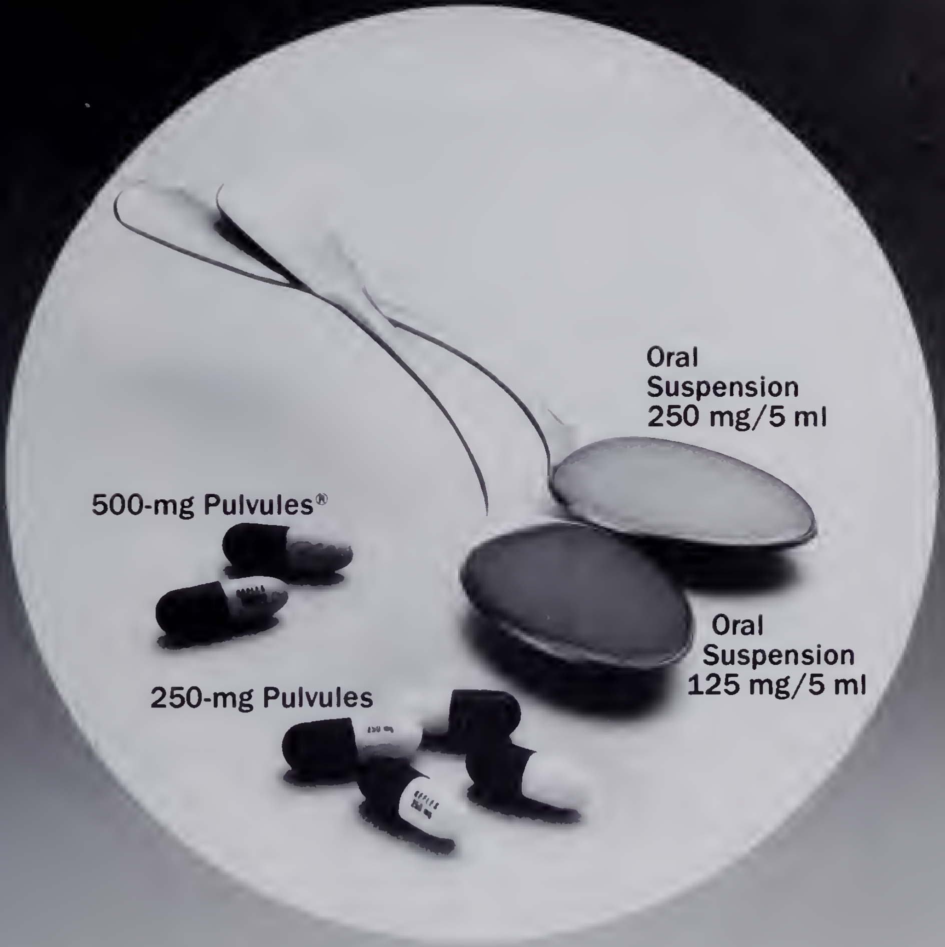

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Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (except in patients with a functioning artificial ventricular pacemaker), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction $< 30\%$ or moderate to severe symptoms of cardiac failure) and in patients with any degree of ventricular dysfunction if they are receiving a beta blocker. (See *Precautions.)* Patients with milder ventricular dysfunction should, if possible, be controlled with optimum doses of digitalis and/or diuretics before ISOPTIN is used. (Note interactions with digoxin under *Precautions*.) ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild and controlled by decrease in ISOPTIN dose). Elevations of transaminases with and without concomitant elevations in alkaline phosphatase and bilirubin have been reported. Such elevations may disappear even with continued treatment; however, four cases of hepatocellular injury by verapamil have been proven by rechallenge. Periodic monitoring of liver function is prudent during verapamil therapy. Patients with atrial flutter or fibrillation and an accessory AV pathway (e.g. W-P-W or L-G-L syndromes) may develop increased antegrade conduction across the aberrant pathway bypassing the AV node, producing a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion, which has been used safely and effectively after ISOPTIN. Because of verapamil's effect on AV conduction and the SA node, 1° AV block and transient bradycardia may occur. High grade block, however, has been infrequently observed. Marked 1° or progressive 2° or 3° AV block requires a dosage reduction or, rarely, discontinuation and institution of appropriate therapy depending upon the clinical situation. Patients with hypertrophic cardiomyopathy (IHSS) received verapamil in doses up to 720 mg/day. It must be appreciated that this group of patients had a serious disease with a high mortality rate and that most were refractory or intolerant to propranolol. A variety of serious adverse effects were seen in this group of patients including sinus bradycardia, 2° AV block, sinus arrest, pulmonary edema and/or severe hypotension. Most adverse effects responded well to dose reduction and only rarely was verapamil discontinued. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of excessive pharmacologic effects. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, close surveillance of vital signs and clinical status should be carried out. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patients should be carefully monitored to avoid over- or under-digitalization. ISOPTIN may have an additive effect on lowering blood pressure in patients receiving oral antihypertensive agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Clinical experience with the concomitant use of ISOPTIN and short- and long-acting nitrates suggest beneficial interaction without undesirable drug interactions. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C*: There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR < 50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%), elevations of liver enzymes have been reported. (See *Warnings*.) The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: ecchymosis, bruising, gynecomastia, psychotic symptoms, confusion, paresthesia, insomnia, somnolence, equilibrium disorder, blurred vision, syncope, muscle cramp, shakiness, claudication, hair loss, macules, spotty menstruation. **How Supplied**: ISOPTIN (verapamil HCl) is supplied in round, scored, film-coated tablets containing either 80 mg or 120 mg of verapamil hydrochloride and embossed with "ISOPTIN 80" or "ISOPTIN 120" on one side and with "KNOLL" on the reverse side. Revised August, 1984 2385

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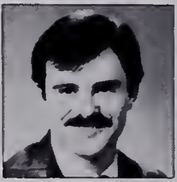

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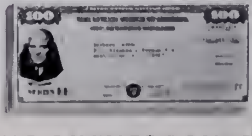

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THE NEBRASKA MEDICAL JOURNAL

Alternatives to Ileostomy

ALEXANDER N. KINGSLEY, M.D., F.A.C.S.
The Colon and Rectal Institute of Nebraska
Lincoln, Nebraska

IN the evolution of the management of Ulcerative Colitis, the spout ileostomy was a major therapeutic milestone. It remains the gold standard against which all other surgical treatment modalities are compared.

Prior to the fifth decade of this century, colectomy was rarely used to treat ulcerative colitis. Nonsurgical management was supportive and symptomatic. It included bedrest, ingestion of opiates or bismuth, colonic irrigation, IV fluids and blood transfusion. The administration of horse serum vaccine against diplostreptococcus was popular but, unfortunately frequently resulted in serum sickness and anaphylactic reactions. The advent of sulphur drugs and antibiotics and the addition of steroids effected a giant leap forward in the care of these patients.

Surgical intervention was initially limited to the formation of an ileostomy to "put the bowel to rest" by diverting the fecal stream, and for antegrade irrigation of the diseased colon which was left in situ. Early ileostomies were fraught with high mortality and severe complications. The procedure was reserved as a last resort in moribund patients. With advances in anesthesia, parenteral infusion and nutrition, antibiotics, blood therapy and better understanding of pathophysiology and improved operative techniques, surgery was being performed on healthier patients at an earlier stage of the disease which resulted in a much improved prognosis. The standard operation included a total proctocolectomy and a spout (Brooke) ileostomy, initially done as a two-stage procedure with the ileostomy as a prelude to the later excision of the colon. By the late 1950's the procedure was performed in one stage, and has remained to this day the standard surgical operation for Ulcerative Colitis and Familial (Multiple) Polyposis Coli. The earlier problems accompanying ileostomy were virtually resolved by the construction of an everted nipple spout, devised by Brooke, and the improvement of stomal collecting prostheses and peristomal skin products.

The majority of patients are satisfied with their stomas; however, about 20% continue to have difficulties due to poor stomal construction or care. The search for an alternative to the incontinent spout ileostomy led to a variety of surgical models. Ileo-Rectal anastomosis was championed by Aylett in England in the 1960's. However, his enthusiasm was not shared by others who vehemently opposed the procedure as it retained the rectum, which is always involved in the disease, and had the potential for malignant change. Recently, due to the relative simplicity of the operation and the much improved surveillance methods available, as well as the belief that the risk of cancer in the retained rectum is much less than was originally thought to be, ileoproctostomy is gaining some advocates.

The continent reservoir ileostomy of Neils Koch of Sweden developed in the 1960's gained some popularity in this country, but the technical intricacies of the procedure and the high rate of post-operative complications, limited the operation to a few major medical centers. The Koch pouch consists of a reservoir constructed from ileal loops folded and anastomosed together, and an outflow tract which leads to a stoma on the abdominal wall. The outflow tract is folded on itself to provide a biological valve which maintains continence. The stool and gas contents of the reservoir are evacuated by intubating the pouch through the stoma. The presence of a disfiguring stoma and the need for regular intubation proved to be cumbersome and unattractive to many patients. The inability of most surgeons to duplicate the reported results of Koch and his associates, the high complication rate, and the need to convert the "pouch" to a Brooke ileostomy in many patients, have dissipated the enthusiasm for the procedure.

The concept of ileo-anal anastomosis was developed at the beginning of this century by Viguolo, Hochenegg, Nissen, Goligher and others who contributed different modifications. In 1947, Ravitch reported his technique of rectal mucosectomy, sphincter preservation, total colectomy, and ileo-anal anastomosis in patients with Ulcerative Colitis. Several prominent surgeons of the time, including Best of Omaha (a pioneer of ileo-anal anastomosis), opposed the procedure citing the high incidence of complications of this complex, tedious, and lengthy operation. It was thirty years later, when Martin and his colleagues reported their success in 15 patients, that genuine interest in the operation was revived. In the meantime, researchers and surgeons working separately developed the various pieces of the surgical puzzle. Gaston elucidated the physiology of anorectal continence. Cazanova Diaz recognized that frequent diarrhea in ileoanal anastomosis was due to the continuous unopposed propulsive ileal peristalsis. Valiente and Bacon, in 1955, were first to place a reservoir poximal to the ileoanal line. They replaced the rectum by two-limb or three-limb ileal pouches in dogs, which considerably slowed down the diarrhea. This was supported by Karlan who proved, in 1959, that a reservoir did indeed improve continence and that a two-limb (J-Pouch) isoperistaltic reservoir emptied more efficiently than the three-limb (S-Pouch) type. Turnbull of Cleveland considered this whole concept a chymera. Nevertheless, the development of ileal pouches continued in different parts of the world. Parks and associates at St. Marks Hospital in England advocated the S-shaped reservoir for post colectomy patients. Fonkalsrud proposed the isoperistaltic H-Pouch and Utsonomyia of Japan designed the J-shaped ileal pouch. The puzzle was now completed.

Today, patients with Ulcerative Colitis or Familial Polyposis Coli, have an alternative to the Brooke ileostomy after removal of their colon. The new procedure of total colectomy, mucosal proctectomy, ileoanal anastomosis and ileal reservoir is a valid, proven therapy. However, the operation is time consuming (4-7 hours), tedious, requires meticulous technique and is accompanied by a high incidence of complications including hemorrhage, anastomotic leaks, sepsis, and bowel obstruction. The Parks S-Pouch had the disadvantage of not spontaneously evacuating with ease and frequently required transanal intubation leading to stasis and pouchitis. Outflow resistance was caused by the length of the efferent limb. This was recently corrected by shortening the limb to one to two centimeters. The J-shaped reservoir is simpler to construct, easier to empty, less prone to inflammation and is functionally equal or superior to the Parks and Fonkalsrud pouches. Its drawbacks are a slightly higher stool frequency and the occasional inability to construct it in a patient with a short ileal mesentery.

We, at the Colon and Rectal Institute of Nebraska, prefer the J-Pouch which continues to yield good results in our patients. We reserve the S-Pouch for patients in whom the construction of the J-Pouch is technically impossible.

Infectious Diarrhea

STEPHEN R. GRENIER, M.D.
Lincoln

THIS month's article on infectious diarrhea, by Dr. Omar and colleagues, is a useful study of infectious diarrhea in Omaha. The primary motivation behind the study was to determine incidence of Campylobacter and Giardia infections. There has been concern about the increasing incidence of these two organisms.

The paper quotes a reference as saying that diarrheal disease is the "third most frequent syndrome seen in the general practice of medicine". Similar statements have been made by those who have studied such conditions as low back pain, tension headaches, the common cold, depression, and others. It is doubtful that diarrheal disease presents with this frequency to physicians in Nebraska. Nevertheless, it is sufficiently common to warrant continued study and discussion.

The sample population was from the University of Nebraska Medical Center. The results are compared with that from the Omaha-Douglas County Health Department and appear similar. 13.8% of the sample had bacterial diarrhea and 7.9% had parasites.

One can question whether or not these percentages apply to other areas of Nebraska. In the book **Biomedical Bestiary: An Epidemiologic Guide to Flaws and Fallacies in the Medical Literature,** the authors describe several pertinent papers. They focus their attention on an original epidemiologic paper by J. Berkson, published in 1946.[1] They later coined the term "Berkson Bias" to argue that "... conclusions of clinical studies drawn from university settings may not accurately reflect what is experienced in a community setting because of selective differences in the two patient groups. Thus, Berkson Bias could modify our understanding of the natural history of these diseases."[2]

This study confirmed increased incidence of Giardia and Campylobacter when compared to previous studies. Reported cases of Giardia in Nebraska were 389 in 1984 and 519 in 1985. Campylobacter cases numbered 111 in 1984 and 277 in 1985.[3] Undiagnosed and unreported cases would add to these totals.

Those physicians with small office labs should be aware that Campylobacter requires increased incubation temperature of 42° C. Most small incubators are set at 35-37° C. This lower temperature is not sufficient to successfully grow the organism.

This study suggests that approximately 78% of the sample population had infectious diarrhea of viral origin. One must assume that some of these cases might possibly have been inflammatory rather than infectious in etiology. For the physician in primary care, this is generally reassuring that lab testing need not be done on most people with acute diarrhea. Bacteriologic testing may be appropriate only for those more severe or chronic cases. As is always the case, each situation should be individualized.

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ORIGINAL ARTICLES

The Autopsy in Medical Science and Clinical Practice: What are We Doing in Nebraska?

JOHN A. BENEKE, B.S.
STEVEN D. SUVALSKY, M.H.S.
BRUCE M. McMANUS, M.D., Ph.D.[*]
From: Departments of Pathology and Microbiology, Pediatrics, and Internal Medicine, University of Nebraska Medical Center, Omaha, NE

TO our knowledge, the role of the autopsy in Nebraska medicine has not been previously discussed. An analysis of the general statistics in Omaha and of the relationship of autopsies to age, sex, clinical service, number of consultations, and length of stay at the University of Nebraska Medical Center (UNMC) has provided us with insights into the local role of the non-forensic autopsy. In this paper we discuss the manner in which the autopsy and related activities must be carried out in order to expand its value in the quest for new answers in pathology.

Status of the Autopsy in Omaha and at UNMC.

The autopsy, as with other medical and surgical procedures, varies in its role according to perceived need, conventions of medical practice, and financial concerns. Primarily because of the increasing fiscal constraints on hospital budgets and legal liability, the national autopsy rate has continued to reach new lows. Numerous other factors contribute to the overall autopsy rate; of these, global antipathy, undue clinical confidence, and disinterest in certain subsets of patients, eg. geriatric groups, women and those dying at home or in emergency rooms, appear most important. The state of Nebraska is subject to the same influences, and, correspondingly, has variable but generally dismal autopsy rates.

In Omaha, based on statistics of 12 medical care facilities for the year July 1, 1982 through June 30, 1983, the overall autopsy rate was 21.6% (Table 1). A total of 620 autopsies were performed in the setting of 2871 deaths. Autopsy rates varied from as low as 0 to as high as 52% for the different institutions and facilities. The number of autopsies per active hospital bed ranged from 0 to 0.47. The number of autopsies per active hospital bed reflects the severity of illness of patients in a given institution, although other factors including those mentioned above are certainly at play.

Evaluation of the deaths and autopsies at UNMC during the same time frame yielded interesting insights. As described by others (1), women have a much lower chance of autopsy than men, 35% vs 55% at UNMC. The older patient has a lower probability of autopsy examination in previous experience, but in 1985 similar rates were achieved at UNMC in those over and under 65 years of age. The length of stay in hospital or number of clinical consultations per service per month did not correlate with the likelihood of autopsy (Table 2). Long hospital stays with frequent consultations suggest very sick patients with complicated disease processes who may cost hospitals more than their DRG "worth", yet often an autopsy was not obtained to resolve these expensive clinical unknowns.

The frequency of major differences between clinical and autopsy diagnoses varied widely from service to service and with age during the 1982-1983 period (Figs 1 and 2). Of 65 patients under 16 years of age, 19 had perinatal disorders other than prematurity. The cause of death was different at autopsy than it was clinically in 8 of the latter patients (43%). Not infrequently, discrepant clinical-autopsy causes of death occurred in the pediatric age group when the major pathologic findings were in the lungs or central nervous

[*] Address for Reprints: Bruce M. McManus, M.D., Ph.D., Director, Autopsy Program, Department of Pathology and Microbiology, UNMC, 42nd and Dewey Avenue, Omaha, NE 68105.

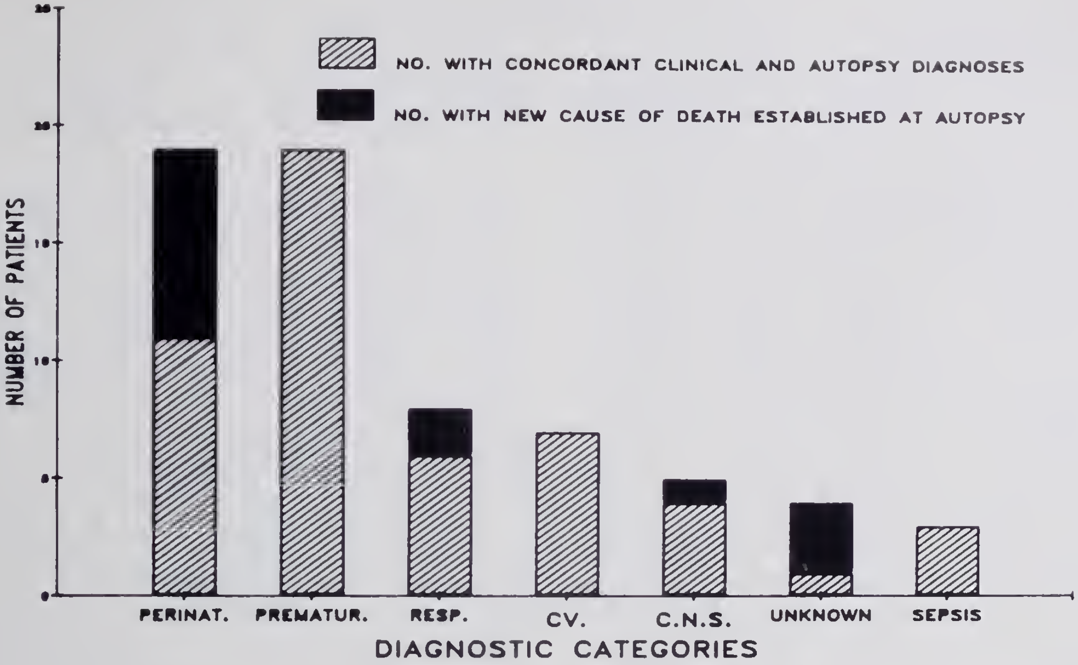

Figure 1
Causes of death as determined by autopsy in 65 patients <16 years of age with or without discrepancies between clinical and autopsy cause of death.

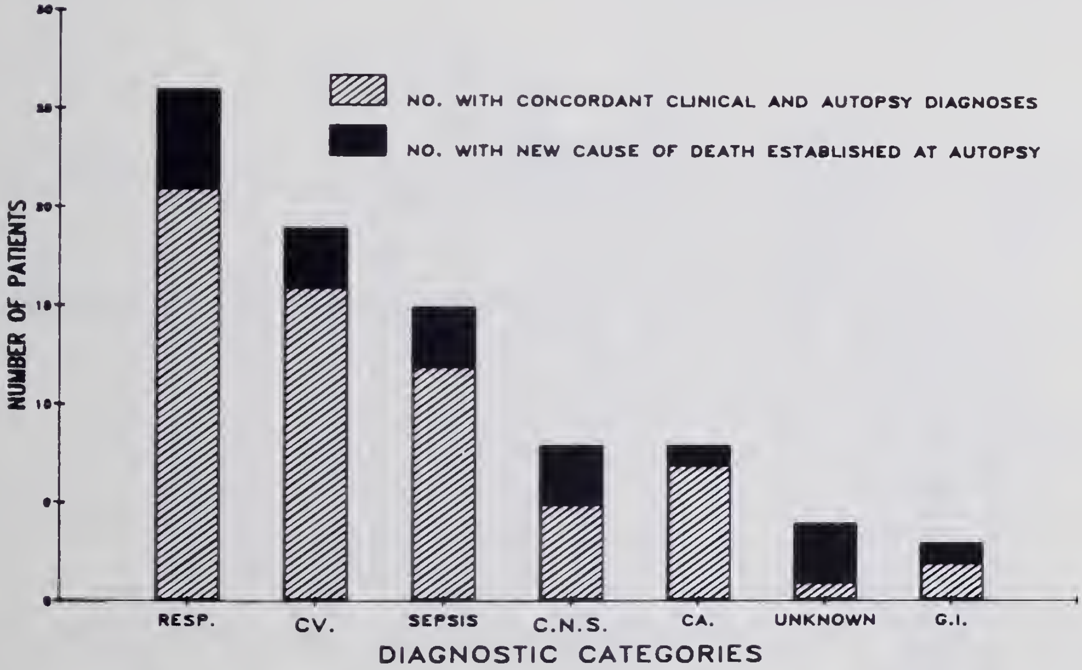

Figure 2
Causes of death as determined by autopsy in 83 patients ≥16 years of age with or without discrepancies between clinical and autopsy cause of death.

TABLE 1

Hospital admissions, deaths and autopsies in greater Omaha metropolitan area from July 1, 1982 through June 30, 1983.

Hospital	Admissions[a]	Deaths	Deaths (#) / Admissions (#)	Autopsies[b] (#)	Autopsy Rate (%)	Beds (%)	Autopsies (#) / Active Beds (#)
Archbishop Bergan-Mercy	19,686	362	0.018	31	8.6	470	0.066
Bishop Clarkson	20,359	433	0.021	95	21.9	523 active 36 nursery	0.182 (0.170)[c]
Douglas County							
Medical	256	45	0.176	0	0.0	51	0.000
Long-Term	243	47	0.193	1	2.1	274	0.004
Immanuel	11,760	273	0.023	32	11.7	386	0.083
Lutheran	7,024	237	0.034	14[d]	5.9	208	0.067
Methodist	21,263	358	0.017	66	18.4	559 active 32 nursery	0.118 (0.112)[c]
Children's	5,310	44	0.008	23	52.3	100	0.230
Methodist Midtown	1,452	70	0.048	0	0.0	230	0.000
Midlands	4,291	75	0.017	16	21.3	208 licensed 152 operating	0.105
St. Joseph	17,952	464	0.026	118	25.4	539[e] 531	0.220
UNMC	11,646	259	0.022	120	46.3	257 active 52 nursery	0.467 (0.388)[c]
Veteran's	8,017	204	0.025	104	50.9	398 licensed[f] 371 active	0.280
Total	129,259	2,871		620		4,112[g]	
Mean			0.022		21.6		0.140
Range			(0.008-0.193)		(0.0-52.3)		(0.000-0.467)

a. Include newborns except at Archbishop Bergan-Mercy, Douglas County, Immanuel, Lutheran, Children's, Methodist Midtown, Midlands, and Veterans Hospitals.

b. Numbers reflect net death rate, ie., do not include autopsies performed on people dying before arrival or while in the emergency room.

c. Including nursery beds.

d. The number of autopsies performed are tabulated from October, 1982 through June, 1983.

e. The number of active beds dropped slightly from 539 to 531 in February, 1983.

f. Richard Young Memorial Hospital and Nebraska Psychiatric Institute, primarily psychiatric facilities, were excluded from this analysis.

g. The total number excludes the nursery beds.

TABLE 2

Interrelation of long hospital stays, frequent consultations and autopsy rates at the University of Nebraska Medical Center from July, 1982 to June, 1983.

	Clinical Department	Length of Stay, (Pooled Monthly Average) (dys)	Deaths/Mo	Autopsies/Mo	Autopsy Rate/Mo	Consultations/Mo
Long Stay	Newborn-High Risk-Outside Referral	24.6	2.25	1.33	59.3	18.0
	Newborn-High Risk	17.9	1.8	1.1	61.1	14.9
	Pain	17.2	0.0	0.0	0.0	0.0
	Oncology-Hematology	10.9	4.0	1.7	42.0	76.75
	Thoracic Surgery Adults)	10.5	0.25	0.25	100.0	3.5
	Diabetes-Endocrine-Metabolic	10.1	0.20	0.0	0.0	54.2
High Number of Consults	General Medicine	8.7	5.1	2.0	39.2	121.25
	Oncology-Hematology	10.9	4.0	1.7	42.0	76.75
	Orthopedic Surgery	6.8	0.1	0.0	0.0	67.4
	Pediatrics	7.0	1.1	0.5	46.2	61.0

system. Of course, when a clinical cause of death was not known, an autopsy commonly established such. When a child died from prematurity, cardiovascular disease or sepsis, pre-and post-mortem causes of death were in near complete agreement.

Perhaps surprisingly, the frequency of clinical-autopsy discrepancies as to cause of death was higher in adults than children (Fig 2). A number of patients in each of the diagnostic categories had different causes of death established by autopsy. For example, 5 of 26 patients (19%) with respiratory causes of death and 3 of 8 patients (38%) with central nervous system had new diagnoses after autopsy. A total 17 of 83 adult patients (24%) had new causes of deaths after autopsy.

Significant differences between clinical and autopsy diagnoses apart from cause of death were frequent in all age groups. Differences between pre- and post-mortem diagnoses in **term** infants dying before 1 year of age, **premature** infants, and **stillborn** infants are distinctive for each of the 3 groups. Cardiac anomalies, severity and type of pulmonary disease and metabolic diseases were the most frequent clarification by autopsy in term infants. Characterization of pulmonary disease is a major ongoing responsibility at autopsy for premature infants with various ventilatory support regimens. In stillborns, placental and umbilical cord abnormalities were the most common new findings at autopsy. The specific impact of the noted pre-to-postmortem differences in diagnoses in the neonatal patients (as well as in other age groups) on potential for improved management and on hospital economics needs to be analyzed.

Efforts Toward Improvement

Recently, the autopsy rate at UNMC has climbed higher. The mean annual rate of autopsies (excluding stillbirth, consult and emergency room autopsies) in 1982, 1983, 1984, and 1985 was 51, 50, 45, and 52%, respectively. In the past year, the monthly rates at UNMC have frequently exceeded 60% (Fig 3). Individual clinical services have varied in their mean annual autopsy rate from as low as 22% (surgery) to as high as 80% (pediatric cardiology), 83% (stillbirths) and 100% (thoracic surgery). The maintenance of reasonable autopsy rates is attributable to continued mutual efforts by clinical and pathology housestaffs and attending staffs. A number of these efforts are worthy of brief elaboration:

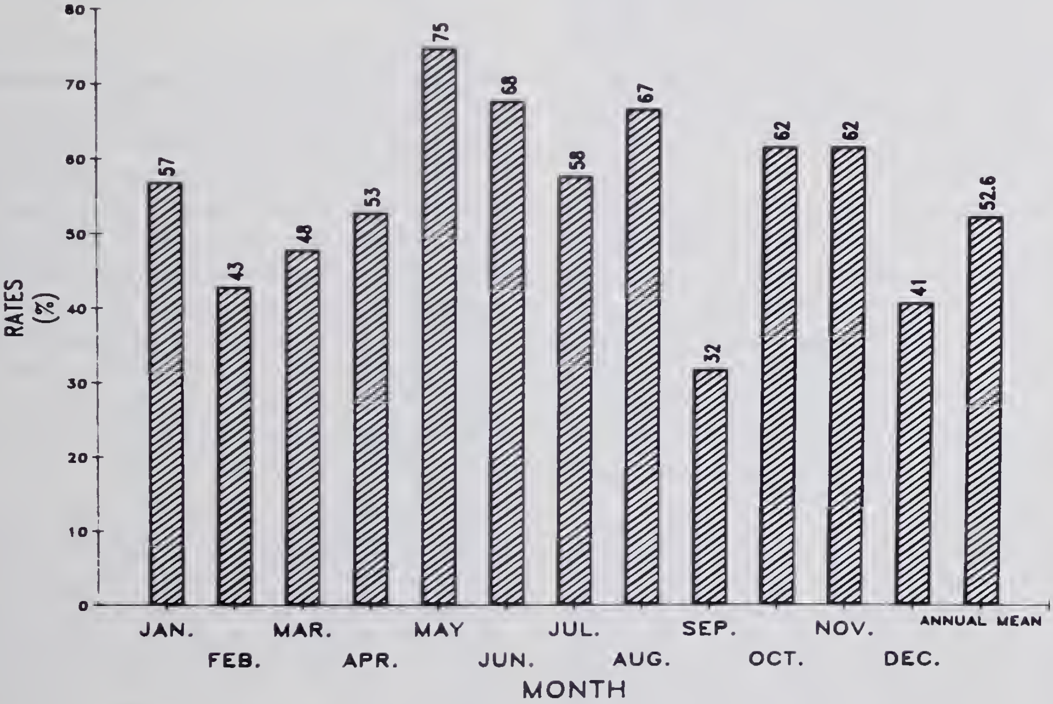

Figure 3
Monthly autopsy rates and annual mean at the University of Nebraska Medical Center for the period from January 1 to December 31, 1985.

1) Several forums for communication between pathologists and the clinical staff are necessary to provide consultative interaction. Pre-autopsy contact is provided on every patient coming to autopsy by way of a **clinical abstract form.** Obscurities of clinical diagnoses, potentially dangerous conditions (occult tuberculosis, viral hepatitis), and major therapeutic uncertainties are provided to pathologists in an abbreviated format along with names of clinical staff who wish to be notified at the time of the autopsy. The pathology resident then contacts appropriate clinicians by telephone before the autopsy, and further nuances are discussed.

2) Attendance at the autopsy by clinicians is encouraged. Furthermore, the participation of clinicians in the **weekly autopsy conference** is strongly urged. Targeting of autopsy conferences to categories of disease has enhanced the ability of relevant clinicians to attend the conference at which their case is being discussed. At the conference, review of the entire clinical scenario, radiologic and gross morphologic findings and early microscopic sections, provides for excellent quality control on the autopsy service. The conference impact is reflected in the quality of final autopsy reports. The probability of actual improvement in clinical care is enhanced by the multidisciplinary review of autopsy cases. If a case is particularly instructive or puzzling, it often becomes the subject of further clinically focused conferences.

3) **Expeditious autopsy reporting** is critical to clinical impact and family support. Post-autopsy telephone contact is made with housestaff or attending staff who were contacted earlier. Subsequently, the preliminary autopsy report is issued within 1 to 2 working days after the autopsy. The final report is completed within 3 weeks of the autopsy, and is available to interested physicians and concerned family members.

4) The process of providing **feedback to families** currently rests upon clinical staff, primary physicians, or social workers. Ideally, a professional liaison, possibly a specially trained nurse, social worker, or physician's assistant, representing the hospital and all health professionals who were involved in the patient's care, would make coordinated contact with bereaved families. With such a designated professional, no doubt would be left about the immediacy of contact with families by the hospital in the event of the death of a loved one. The impact on public trust and feelings of consolation would be immense. An approach taken by Maria Valdes-Dapena, M.D., nationally recognized leader in research in the sudden infant death syndrome, is for the pathologist to hold a post-mortem conference with families. In her experience a timely conference approximately 3 weeks after the autopsy is deeply appreciated by families and has a significant positive impact on their lives.[2] Protection of the family's dignity is, as always, of utmost importance.

5) Information as to how individual departments are doing in obtaining autopsies is transmitted as monthly and year-end **annotated histograms** to all clinical hospital services (Fig 4). The simple statistics may surprise individual physicians, stimulating them to make a stronger effort on behalf of their department. The annotation provides an avenue for information transmission about changes in autopsy-related conferences and policies. As well, brief perspectives by clinical faculty who have been consistently successful in obtaining autopsies are included in the monthly reports.

6) Efforts to **maximize use of tissues and organs** at autopsy have been directed toward intra- and interinstitutional programs. The longstanding National Pituitary Bank for extraction of growth hormone has recently been arrested by fears about Jakob-Creutzfeldt disease. Important investigative programs continue. The geographic distribution of pesticides in human fat and of fibrous pleural plaques are two extramural programs in which we participate. Numerous UNMC clinical and basic scientists are studying fundamental disease processes by virtue of cells and tissues made available by autopsy.

7) A number of partial and complete **consult autopsies** are performed yearly at UNMC. These autopsies are often in relation to patients followed clinically at UNMC but who live outside of Omaha. The consultative partial autopsy reviews are conducted in a fashion similar to consultations on surgical or cytologic specimens. Consultative review on autopsy material at most hospitals is all too uncommon. It serves as a vital information link

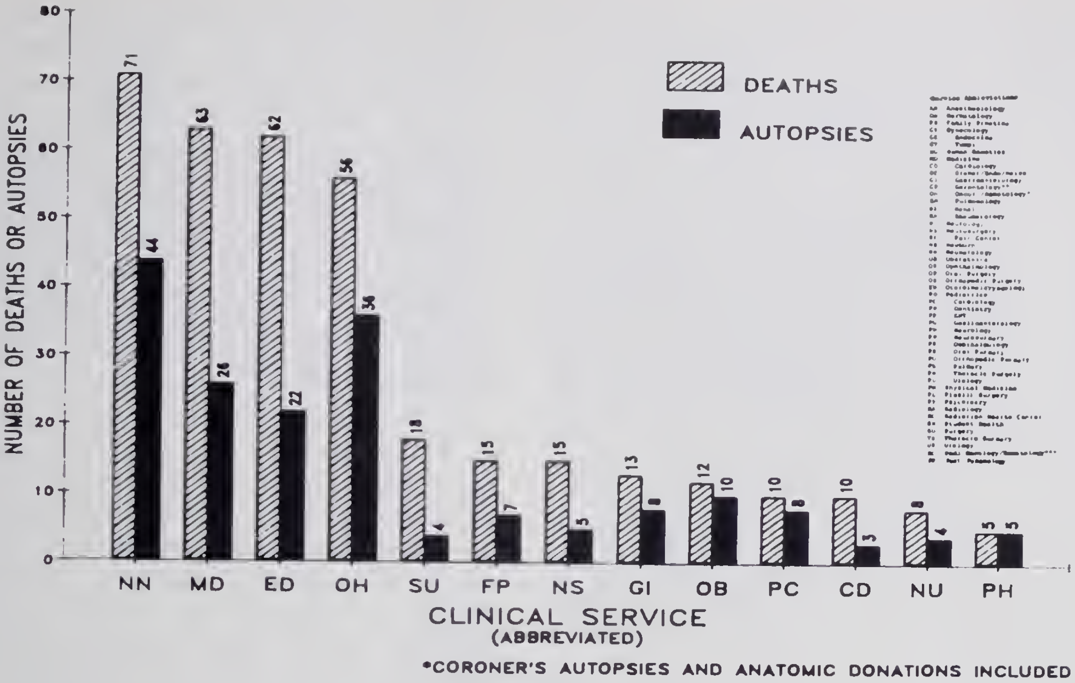

Figure 4
Total deaths and autopsies for each clinical service at the University of Nebraska Medical Center with ≥ 5 deaths for the period from January 1 to December 31, 1985.

between physicians in the state-wide community-at-large and specialists in disease processes or organ systems.

8)Provision of multilevel **educational experiences** in autopsy pathology to medical students, and residents of all kinds is essential to the proper introduction of young physicians to the disorders they will try to indentify and manage in clinical practice. Direct involvement in autopsies, as well as tissue and organ scrutiny in systems pathology laboratories, of course, rest on the quality and quantity of autopsies performed. Opportunities are made available to medical students between their first and second years, and during their subsequent years, to be trained and work as a student pathologists' assistant. This program has been very popular. One of its key strengths lies with our graduate level trained pathologists' assistant[3] who coordinates communication on the autopsy service, guides technical quality, and fosters positive attitudes toward responsibility and patient dignity.

Prospect

The role of the autopsy in today's medical practice is coming under more intense scrutiny. The Joint Commission on Accreditation of Hospitals (JCAH) has issued policy statements indicating general support for the autopsy, but has continued to fall short of requiring that at least a modecum of autopsies be performed annually. As a major force in health care standardization, should not the role of the JCAH in promoting the autopsy be more active? The critical timeliness of the question is illustrated by the recently publicized working document on autopsy policy developed by the Institute of Medicine — National Academy of Sciences, Washington, DC. In an indepth assessment of the current state of the autopsy, the Institute recommends a thorough review of several issues central to the "survival" of the autopsy as a meaningful force in medicine. At least the following matters require thoughtful attention: 1) criteria for physicians' decisions to perform an autopsy, 2) issues of consent, 3) procedures to promote both the usefulness and use of autopsy-derived information, 4) a broadly applicable system for payment of autopsy-associated financial costs, and 5) criteria for assessing the adequacy of autopsy rates.

Concurrent to the demonstrated interest of the Institute of Medicine, groups much closer to the autopsy have mirrored concerns. The Association of Pathology Chairman (APC) in its October, 1985, meeting, devoted considerable time to autopsy conundrums. Dr. George Lundberg, Editor of JAMA, detailed the current situation in 87 Chicago hospitals. The overall autopsy rate was 18.6%. Disturbingly, only 2 hospitals had rates >50%, while 39 had rates <10%. He reminded the APC, just as Guariglia and Abrahams did in their recent analysis of the potential for autopsy impact on DRG reimbursement, that current autopsy reimbursement **does** occur as an overhead item under Part A of Medicare and as part of DRG reimbursement for a given patient. Possibilities for reimbursement for autopsy diagnoses (through direct influence on DRGs) under Part B is not possible at the current time since dead patients do not qualify for reimbursements for diagnostic and therapeutic services.

The outlook may be even brighter than generally understood if the experience of Beth Israel Hospital in Boston is representative of autopsy-related reimbursement. In 1984, they had a net loss of only $5,200 after expenditure of over $300,000 on a service doing 240 cases yearly (33% of hospital deaths). Their reimbursement was derived from Medicare, Medicaid, Blue Plans, and other third-party payers. Thus, while costs are considerable, even by conservative estimate (Table 3), perhaps the failure of hospitals to recoup their autopsy expenditures lies with failure to realize reimbursement potentials, and with pathology departments' unawareness of their responsibility to secondarily obtain these funds from hospital administration.

At the APC meeting Dr. Lundberg reaffirmed the support of the American Medical Association, JAMA, and the College of American Pathologists for the autopsy. Furthermore, Dr. Robert Anderson reviewed the results of a survey of generally favorable attitudes of chairmen of surgery and internal medicine regarding the autopsy. Most acknowledged discrepancies of 5-15% in antemortem and postmortem diagnoses. Few thought that more discrepancies occurred. **Slow autopsy reporting** was the most frequent complaint about autopsies. The value of the autopsy was least clearly understood by the youngest of

TABLE 3

The approximate direct[a] cost of an autopsy at the University of Nebraska Medical Center as of January, 1986.

Personnel	Hours worked	Dollar($) cost/hour	Item cost($)	Equipment and tests	Item cost($)
Pathologist's Assistant	13[b]	10	130	25 H&E slides	75
Staff Pathologist	8	40	320	5 special stains	65
Resident Pathologist	20	10	200	Blood culture, microbiological	74
Consultant Pathologist	4	40	160	Tissue culture, microbiological	38
Clerical	7	5	35	Special studies	40
Ancillary Technicians	3	7	21	(Karyotype, cell markers, toxicology)	[c]
				1 X-ray	15
Total			866	Routine supplies	25
				Paper	6
				Photographic film	8
				Total	346

Grand Total 866 + 346 = 1212

a. Capital expenditures and depreciatory cost related to the autopsy facility are not included in this estimate. Costs are estimates based upon average effort in "average" autopsy.

b. Number of hours based upon full-time employment on the autopsy service and upon current autopsy rate.

c. Varies markedly from case to case, from 0 to $300.

physicians. The latter observation is worrisome since clinical housestaff motivation appears to be an important force behind the acquisition of autopsies.

Coordinated efforts must be made to bring pathologists, clinicians, hospital financiers and administrators, and families to a reasonable common ground of understanding about the meaning and the value of the autopsy as the final medical examination. Only through a serious bent on revitalization of the autopsy can the littany of personnel and procedures, to which dying patients are now subjected in this era of public, depersonalized dying, be comfortably justified to a grieving family, a confused medical student, an uncertain diagnostician, or a scientist in search of a cure.

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Functional Results of Restorative Proctocolectomy in the Management of Chronic Ulcerative Colitis

ALAN G. THORSON, M.D.*
MARK A. CHRISTENSEN, M.D.
JOHN H. BRUSH, M.D.
J. B. CHRISTENSEN, M.D.

OPERATIVE intervention in the management of ulcerative colitis may become necessary in specific instances. This may be during an acute attack as a result of hemorrhage, perforation or toxic megacolon. Operation may also become necessary in chronic ulcerative colitis because of progressive disease uncontrolled medically or due to the risk of malignant degeneration. In either case, the goal of therapy is the elimination of symptomatic colonic disease and, ultimately, the prevention of cancer. The standard operation, with a proven record in fulfilling this goal, is total proctocolectomy with a Brooke ileostomy.

Recent advances in the understanding of sphincter, sensory, and reservoir functions in the maintenance of anal continence have provided a basis for developing alternative operations.[1-3] Ulcerative colitis, as manifested in the colon, is a disease limited to the mucosa. Removal of the entire abdominal colon and just the mucosa in the anal canal and distal rectum will elimate the disease while preserving the important sensory and muscular elements of continence. Reservoir function, which is lost during proctectomy, may be restored with a neorectum constructed of distal ileum.[4]

Utilizing the technique of restorative proctocolectomy (total abdominal colectomy with rectal mucosectomy, reservoir construction from distal ileum, and ileoanal anastomosis), the major elements of continence are preserved. The patient is cured of their colon disease and the risk of cancer is eliminated. Most importantly, in the eyes of many patients, a stoma is avoided.

Overall, patient acceptance must ultimately relate to the functional results of restorative proctocolectomy. We have reviewed our experience from 1982 to the present in patients with chronic ulcerative colitis. Patients with familial polyposis could be candidates for the same operation.

Methods

We have managed a total of ten patients with ulcerative colitis by utilizing restorative proctocolectomy. Nine patients have been managed utilizing a two stage approach. The inital operation consists of total abdominal colectomy, rectal mucosectomy, ileal reservoir, ileoanal anastomosis, and temporary divided loop ileostomy. The second stage is closure of the ileostomy. The technical aspects have been previously described.[5]

A single patient has been managed with a three stage approach. Her initial abdominal colectomy, Hartman's pouch, and end ileostomy was necessitated by colon perforation with intra-abdominal sepsis while on intensive medical management. She is currently awaiting the second stage which will consist of proctectomy, rectal mucosectomy, ileal reservoir, ileoanal anastomosis, and loop ileostomy. The third stage will consist of ileostomy closure.

Two of the nine have yet to have their ileostomies closed and thus are not included in this review. The remaining seven patients were contacted through telephone interviews and each asked an identical set of questions. Questions were specifically addressed to stool frequency, continence, evacuation, bowel regulation, sexual function, and quality of life.

Results

There are four male and three female patients. The age of our patients ranged from

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*Reprint requests: Alan G. Thorson, M.D., 711 Professional Tower, 105 S. 17th Street, Omaha, NE 68102.

20 to 59 years at the time of initial operation. The average age was 34 years.

Stool Frequency

Preoperatively, the number of stools per 24 hours ranged from seven to thirty (average 12.1). Postoperatively, this number ranges from two to twelve (average 6.1). These stools tend to be clustered during specific times of day, ie. in the morning, following the evening meal or before retiring. This results in controlled and very manageable situations for evacuation compared to the uncontrolled preoperative experience.

Stool frequency decreases with passage of time following operation. Those patients greater than six months postoperatively average 3.5 stools per day. Those six months or less postoperative average 9.6 stools per day. (Figure 1)

Continence

All patients have maintained reasonable continence. Forty-three percent have a small amount of mucous discharge during the daytime. This may relate to the low mucocutaneous anastomosis. None have had an episode of gross fecal soilage after the initial retraining period following closure of the ileostomy. The incidence of mucous discharge increases to 71% at night but, again, there has been no gross fecal soilage. Forty-three percent wear a pad during the day. This assists in keeping the perianal area dry. Fifty-seven percent wear a pad at night. (Table 1)

Evacuation

Fifty-five percent of our patients are currently utilizing intubation routinely in order to evacuate their reservoirs. Thirty percent do so at bedtime as a precaution against having to

Figure I

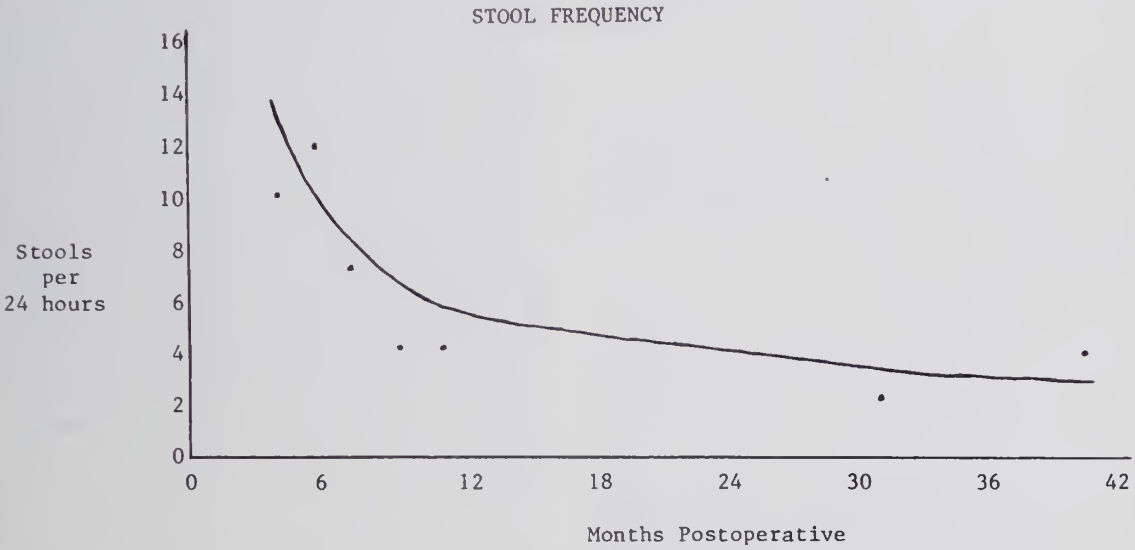

Table I

CONTINENCE	Daytime(%)	Nighttime(%)
Always continent	57	29
Mucous discharge	43	71
Occasional loss of control	0	0
Incontinent	0	0

get up at night and against nighttime incontinence. Fifteen percent never utilize a tube. We have found that the incidence of intubation has decreased as we have decreased the length of the spout from the reservoir to the ileoanal anastomosis. We expect to see this rate decrease significantly in the future. Others share the same experience.[4] The time required for evacuation is less than five minutes in 85% of patients and never exceeds 15 minutes.

Bowel Regulation

Seventy percent require no medication for bowel regulation. The remainder use an antidiarrheal such as loperamide or diphenoxylate to decrease stool frequency. This is more often necessary early in the postoperative period.

Sixty percent have not found it necessary to modify their diet. The other forty percent have identified certain foods which tend to increase the number of stools per day but none have found it necessary to totally eliminate a desirable item from their menu.

Sexual Function

Of the male patients, 100% report normal erectile and ejaculatory function postoperatively. Similarly, no female patients report sexual alteration although there have been no pregnancies in our group.

Overall Assessment

All patients had a temporary diverting ileostomy. When asked their opinion of the reservoir compared to the stoma, 100% responded that the reservoir was associated with a better quality of life.

All of the patients except one believe that the overall results are continuing to improve with time. The single patient who feels function has stabilized is now 41 months postoperative. All have returned to their previous employment.

Discussion

The operative management of ulcerative colitis (and familial polyposis) should eliminate all colon disease and prevent colorectal cancer. The ideal operation would accomplish both of these goals while avoiding a stoma, maintaining normal continence and acceptable stool frequency, and do so with minimal morbidity and mortality.

Restorative proctocolectomy is currently our best approach to these goals. Absolute contraindications to the procedure are Crohn's disease and anal incontinence. Also, as age increases sphinter quality decreases so that careful assessment of sphincter function becomes more important as age progresses. Advancing age, then, becomes a relative contraindication.

Although the procedure carries a significant risk of postoperative complication,[4] functional results are encouraging and certainly acceptable to most patients who have experienced life with both a stoma and an ileal reservoir. Restorative proctocolectomy should be offered as an alternative to patients requiring colectomy for chronic ulcerative colitis or familial polyposis.

Summary

Since 1982 we have managed ten patients with ulcerative colitis utilizing the technique of restorative proctocolectomy. Nine patients have undergone a two stage approach. One patient required a three stage approach. A review of the functional results demonstrated an average stool frequency of 6.1 stools per day. Considering only those patients greater than six months postoperatively, the average frequency was 3.5 stools per day. All patients are continent. There has been no sexual dysfunction. Restorative proctocolectomy provides satisfactory function to selected patients and should be offered as an alternative to patients requiring colectomy for ulcerative colitis.

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A Survey of Infectious Diarrhea Caused by Bacteria and Parasites in the Omaha Area

ABDULLAH OMAR, M.D.*
NORMAN G. MILLER, Ph.D.
PAUL A. YAM, Ph.D.
HARRY W. McFADDEN, JR., M.D.
Department of Pathology and Microbiology, University of Nebraska Medical Center, Omaha, Nebraska

INFECTIOUS diarrhea is among the most debilitating diseases involving people of all ages in the world. In many heavily populated and developing areas, deaths from infectious diarrhea exceed those from any other cause. Although diarrheal disease has been reduced significantly in the United States in the past fifty years, it remains the third most frequent syndrome seen in the general practice of medicine.[1]

Symptoms of infectious diarrhea vary from mild to severe and are usually not helpful in determining the etiologic agent. Regardless of the etiologic agent, liquid stools with abnormally high frequency are common for this disease. The syndrome is usually self-limiting and does not normally last for more than 10 days. Chronic and convalescent carriers are described for many of these enteric diseases and play a significant role in their dissemination. The identification of the causative agent is important for the clinical management of the patient, particularly in directing the use of antimicrobial agents and for controlling the spread of the disease by implementing the proper preventative measures.[2]

Infectious diarrhea is caused by a large number of microorganisms. Until the late 1960's, the etiology of most cases of diarrhea was unknown except in epidemics or local outbreaks. In only 10 to 20% of sporadic cases could an enteric pathogen be identified, usually **salmonellae** or **shigellae.** The remaining cases were considered non-specific usually because of the lack of identification. This has changed with the development of improved techniques resulting in the recognition of the bacterium **Campylobacter jejuni** and the parasite **Giardia lamblia,** both of which are now recognized as the cause of major outbreaks of infectious diarrhea in the United States.[3, 4]

The purpose of this study was to determine the incidence of **C. jejuni** and **G. lamblia** as causes of infectious diarrhea in the Omaha area in comparison with other areas of the United States. A comparison was also made with other intestinal bacteria and parasites capable of causing enteric disease in the Omaha area.

Materials and Methods

Specimens. Stool specimens were examined over a one year period (1984) from 527 patients of all ages with symptoms of infectious diarrhea. Direct examination was done on 383 stools for parasites and 144 stools and rectal swabs were cultured for bacteria at the Clinical Microbiology Laboratory of the University of Nebraska Medical Center.

Ova and Parasites. A direct wet preparation examination (saline and iodine) of each stool specimen was done immediately upon receiving the specimen. A portion of the fecal specimen was further studied by the formalin-ethylacetate concentration method.[5] Saline preparation and iodine preparations of concentrated material were examined for ova and parasites. All positive specimens were confirmed by measurement with a Filar micrometer eye piece (American Optical Co., Buffalo, N.Y.) and by study of a trichrome stain.

Salmonella and Shigella. Stool specimens or rectal swabs were innoculated into MacConkey and Hektoen Enteric (HE) plates and into Gram-Negative broth. The broth was subcultured to MacConkey and HE plates after 8 to 10 hours incubation at 35° C. After

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*Reprint requests to: Dr. Abdullah Omar, Department of Pathology and Microbiology, University of Nebraska Medical Center, Omaha, Nebraska 68105.

18 to 24 hours incubation of culture plates at 35° C, suspected colonies of **Salmonella** or **Shigella** were inoculated into Kligler's iron agar, lysine iron agar, and Christensen's urea agar for screening purposes. When the screening test suggested **Salmonella** or **Shigella**, the identity of the organism was confirmed by the use of the agglutination test (Fisher Scientific Company, St. Louis, Missouri) and the API 20-Enterobacteriaceae (API 20-E, Analytab Products, Plainview, New York) biochemical tests.

Campylobacter jejuni. Rectal swabs or stool specimens were inoculated onto Campy-BAP selective medium and into Campy-thio broth. The plates were incubated in a Gas Pack jar with Campypack II (BBL Microbiology Systems, Cockeysville, MD) for 24 to 72 hours in a 42° C incubator. After 6 to 8 hours of incubation at 4° C, the broth was subcultured to a Campy-BAP and incubated at 42° C as mentioned above. The plates were examined at 24, 48 and 72 hours. Any suspicious colonies were screened by the oxidase test, Gram stained and further identified by the nalidixic acid susceptibility test[6] and other biochemical tests.

Yersinia enterocolitica. Rectal swabs or stool specimens were inoculated onto MacConkey, Salmonella-Shigella (SS) and Cefsulodin-Irgasan-Novobiocin (CIN) plates as well as into 1/15 M phosphate buffered saline. The plated media were incubated at 25° C. The phosphate buffered saline was incubated at 4° C and subcultured on days 7, 14 and 21 to MacConkey, SS and CIN plates. After the plates were incubated at 25° C for 48 hours, suspected colonies were inoculated into Kligler's iron agar, lysine iron agar, peptone broth and Christensen's urea agar to screen for the presence of **Y. enterocolitica.** Further confirmation of **Y. enterocolitica** was done using API 20-E or conventional biochemical tests.

Results

Bacteria and parasites identified. Of 144 stool and rectal cultures from patients with infectious diarrhea, 20 or 13.8% were positive for bacteria causing this syndrome (Table 1). Of these 20 positive cultures, **Salmonella** sp. accounted for 7, **Campylobacter jejuni** for 6, **Shigella flexneri** for 4 and **Yersinia enterocolitica** for 3. One of the **Salmonella** sp. was **S. typhi** which was isolated from the gallbladder of a patient. This represented a chronic carrier state.

Thirty or 7.9% of the 383 stools examined were positive for parasites. Of the parasites causing infectious diarrhea, **Giardia lamblia** was found in 19 stool samples and **Entamoeba histolytica** in 4 samples. **Endolimax (Entamoeba) nana** was seen in 3 stool samples and **Ancylostoma duodenale, Clonorchis sinensis, Strongyloides stercoralis** and **Trichomonas hominis (intestinalis)** were each seen in 1 sample (Table 2).

These results compare favorably with those obtained from various other sources in Douglas County as reported to the Douglas County Health Department during 1983 (Tables 1 and 2).

TABLE 1

A comparison of the bacterial isolates in 144 stools from patients with infectious diarrhea at the University of Nebraska Medical Center (UNMC) during 1984 and those reported to Omaha Douglas County Health Department (ODCHD) during 1983.

BACTERIA	Number identified at UNMC	Percent of total stools (144) at UNMC	Number identified at ODCHD
Salmonella enteritidis	6 } 7	4.8	28
Salmonella typhi	1		
Campylobacter jejuni	6	4.2	31
Shigella flexneri	4	2.7	20
Yersinia enterocolitica	3	2.1	5
Total	20	13.8	84

TABLE 2

A comparison of parasites identified in stools from patients with infectious diarrhea at the University of Nebraska Medical Center (UNMC) during 1984 and those reported to the Omaha Douglas County Health Department (ODCHD) during 1983.

PARASITES	Number identified at UNMC	Percent of total stools (383) at UNMC	Number identified at ODCHD
Giardia lamblia*	19	4.9	59
Entamoeba histolytica*	4	1.0	1
Endolimax (Entamoeba) nana	3	0.8	—
Trichomonas hominis	1	0.3	—
Ancylostoma duodenale	1	0.3	—
Chlonorchis sinensis	1	0.3	—
Strongyloides stercoralis	1	0.3	—
Total	30	7.9	60

*Cause infectious diarrhea

Age and sex distribution. Positive results were found in 18 females and 14 males aged 18 and over. In children under 18 years there were 12 males and 6 females. Considering all ages, the incidence of infectious diarrhea was higher in males than females and slightly higher in adults (32) than children (18).

Seasonal incidence. A comparison of the seasonal incidence of infectious diarrhea in the Omaha area reported by the Douglas County Health Department (1983) and our study (1984) shows a peak during the months of June and July. Except for January 1983, when 10 cases were reported to the Douglas County Health Department, the incidence of this disease was relatively low during the fall, winter and spring (Fig. 1).

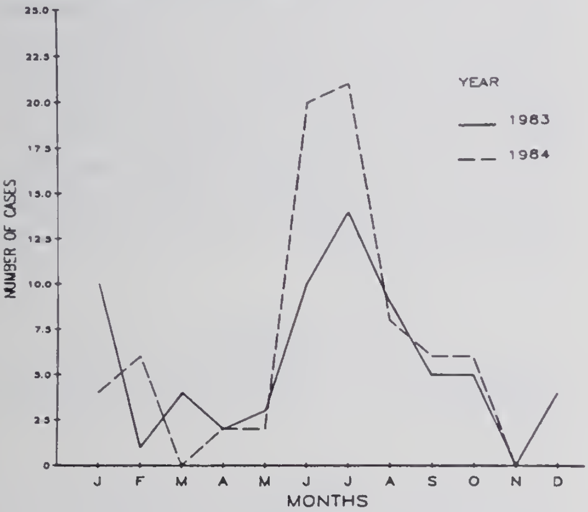

FIGURE 1
The seasonal incidence of infectious diarrhea in the Omaha area as reported by the Douglas County Health Department during 1983 and the University of Nebraska Medical Center during 1984.

Geographic location. The largest number of cases of infectious diarrhea was in northeast Omaha. This includes an area along the Missouri River and the adjacent city of Carter Lake, Iowa. Of the 42 cases identified in the Omaha area during 1984, 13 cases were tracked to this area of greater Omaha.

Discussion

The examination of 527 stools for bacteria and parasites from patients with symptoms of diarrhea in the Omaha area during 1984 revealed an incidence of bacteria of 13.8% and of parasites 7.9%. Of these, **A. duodenale, S. stercoralis,** and **C. sinensis** are not commonly associated with diarrhea and probably were found incidentally in the diarrheic stool resulting from another cause. All other organisms listed were most likely the etiologic agent of the diarrhea, except for **E. nana** and **T. hominis** which are commensals.

G. lamblia, S. enteritidis and **C. jejuni** were the leading causes of infectious diarrhea in the Omaha area during the one year survey. Infections with **G. lamblia** have been increasing steadily in Douglas County from 21 cases reported in 1982 to 59 cases reported in 1984 (personal communication). This is also reflected in the State of Nebraska Morbidity Report of May 20, 1985 which listed 96 cases, the largest number among the infectious agents causing gastrointestinal disease in the state. Giardiasis is considered a waterborne disease and has become a nationwide problem as 3% to 7% of the stools examined in the United States contained **G. lamblia.**[4, 7]

Although **Salmonella** sp. and **C. jejuni** were isolated from approximately the same number of patients with diarrhea during 1984 (Table 1), the number of **Salmonella** cases reported to the Douglas County Health Department declined over a three year period from 1981-83 and **C. jejuni** increased over the same period of time. However, at the state and national level, **Salmonella** sp. remain the most common cause of infectious diarrhea. As seen in our survey, **C. jejuni** is rapidly becoming an important cause of infectious diarrhea, surpassing **Shigella** and almost equaling the number of **Salmonella.** A recent survey of enteritis caused by **C. jejuni** in the midwestern United States showed an incidence of 4.9%[8] which is similar to the 4.2% reported in this survey. Cultures obtained from 8097 fecal specimens from eight hospitals across the United States from patients with diarrhea showed a higher incidence of **C. jejuni** than either **Salmonella** or **Shigella.**[3]

Although present in 2.1% of the 144 stools examined in this survey, only 7 cases caused by **Y. enterocolitica** were reported to the Douglas County Health Department during 1984 (Table 1). Although **Y. enterocolitica** infections have become reportable only recently, it is surprising that more cases of infectious diarrhea caused by this organism are not seen since this organism is prevalent in the environment. It has been reported that 26% to

47% of the surface waters in the midwestern states are contaminated with this organism.[9]

The 1.0% incidence of **E. histolytica** in stools of patients with diarrhea during our survey agrees with another survey conducted in several state health department laboratories throughout the United States in which an incidence of 0.9% was reported.[10] The infection rate in the United States is estimated to be 3% which includes mostly individuals with mild symptoms.[11]

The increase in cases of infectious diarrhea from May through September reflects those caused by bacteria in the genera **Campylobacter, Salmonella** and **Shigella.** Others have also reported a similar seasonal incidence of cases caused by **C. jejuni** and **Salmonella.**[3, 12] In contrast, **Y. enterocolitica** infections occur primarily in the winter and early spring. Infectious diarrhea caused by **G. lamblia** shows no seasonal preference.[7]

It is of interest in this study that the young adults, 18 to 30 years of age and children were the largest groups infected with **C. jejuni.** According to Smith et al.,[8] these groups also made up the largest number infected with **C. jejuni** in their study in the midwest. In a nationwide survey, Blazer et al.[3] reported the highest isolation rate of **C. jejuni** from individuals 10 to 29 years of age. They also found that **Salmonella** and **Shigella** occurred most frequently in children younger than 10 years of age. Of the 10 cases of salmonellosis and shigellosis in this study, there were only 3 cases in that age category. No difference could be seen between children (under 18), young adults (between 18 and 30), and persons over 30 years of age with respect to **G. lamblia** infections. In a survey in a semicommunal group in California, Millet et al.[14] found that **G. lamblia** was most prevalent in children under 6 years of age. This may have been the result of person to person transmission as observed in day care centers.[15] Of the four cases of **E. histolytica** infections identified in this study, three were in young adults and one was in a child. No age or sex preference was noted with respect to infection with this parasite although outbreaks of amebiasis have been reported recently in homosexual men.[16] Amebiasis is primarily associated with poor sanitary conditions and a low socioeconomic status in a community as pointed out by Martinez and Martinez.[17] It was of particular interest in this study that the vast majority of persons with infectious diarrhea are inhabitants of a low socioeconomic area of greater Omaha.

Summary

Stool and rectal swabs from 144 patients with infectious diarrhea in the greater Omaha area during 1984 yielded 20 or 13.8% positive bacterial cultures. **Salmonella enteritidis** accounted for 6, **S. typhi** for 1, **Campylobacter jejuni** for 6, **Shigella flexneri** for 4, and **Yersinia enterocolitica** for 3 of the 20 cultures. Of 383 stools from patients with infectious diarrhea examined for parasites, 30 or 7.9% were positive. **Giardia lamblia** was by far the most prevelant parasite encountered in 19 or 4.9% of the stools. **Entamoeba histolytica** was identified in 4 or 1.0% of the stools. Male children showed an incidence of infectious diarrhea which was twice that of female children. The number of cases of infectious diarrhea reached a peak during June and July in both 1983 and 1984. Northeast Omaha had the highest number of cases during the one year survey.

Acknowledgement:

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dents. Many came from outstate Nebraska and western Iowa. In September of '52, 77 patients at Childrens had polio. It is safe to say that the Childrens inpatient population was well over the 100 patients the building was intended to hold. There was not room for all the iron lungs in the rooms and wards, so many lined the halls. At one time in 1952, 29 iron lungs were going at the hospital.[26]

Iron lungs (or tank respirators) weighed 700 pounds. They were about eight feet long and stood five feet high.[27] In case of a power failure, a large crank was supplied to work the respirator manually—something akin to starting a Model T, but on a continuous basis. Omaha received iron lungs from the National Foundation for Infantile Paralysis,[28] which maintained an iron lung bank in Boston.[29] Nebraska cities and counties bought iron lungs and shipped them to Omaha, sometimes with patients already inside. Local baseball players played many benefit games to raise funds for more iron lungs.[30] Offutt Air Force Base officials coordinated several flights to bring iron lungs to Omaha.[31]

The National Foundation established 14 regional respiratory centers in order to show the best possible treatment for polio patients with respiratory involvement. One of these centers was in Omaha: the Creighton University Poliomyelitis Respiratory Center at St. Joseph's Hospital.[32] Those who remember it described it as a gymnasium-size room with rows of iron lungs.

Omaha residents were afraid to seek medical care for other ailments because of the fear they would contact polio while at a hospitl that was caring for polio patients. The State Health Department required 14 days of isolation for newly diagnosed cases.[33] Hospital personnel were over-worked and under-rested. They too feared catching the polio virus while caring for polio patients. The National Foundation sent a woman from New York to organize volunteers at Childrens Memorial Hospital. Called PEVs (polio emergency volunteers), these individuals helped lessen the work burden and provided warmth and emotional support to patients and their families.[34]

Enter Dr. Jonas Salk, a specialist in the study of viruses. With the support of the National Foundation, Dr. Salk had prepared a polio vaccine. After testing the vaccine on children in the Pittsburgh area, the field trials were expanded nationwide. Dr. Francis of the University of Michigan was in absolute control of field trials. Only he and his team knew who got the vaccine and who got the placebo.[35] Later, it was learned that all children in Omaha received the polio vaccine, in a series of separate shots.[36] Children in grades one through four received the shots in 1955.[37] Physician volunteers from the Omaha-Douglas County Medical Society immunized 20,233 children that year.[38] In late Autumn 1956, the vaccine became available to all citizens, children and adults.[39]

In 1953, there were only 16 new polio cases in Douglas County.[40] Even though the Salk vaccine was not 100% effective, [41] polio was loosing its battle to kill and paralyze. The oral polio vaccine, developed by Dr. Albert Sabin, was introduced in 1961.[42] Through mass campaigns and routine immunizations, the incidence of polio has decreased sharply from 16,000 cases per year in the United States in the early 1950's to only 12 cases in 1983.[43] For those born later, polio seems to be a disease of the past, scary TRUE stories from Gramma, and so much copy in the history books. For those who lived through polio's era, memories of that time are worse than being forced to watch a terrifying movie for three or four reruns. By yourself. All alone. In the dark.

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PERINATAL PAGE

Overdosage of Subcutaneous Terbutaline in the Treatment of Preterm Labor

DR. GILLES MONIF, Editor

WASHINGTON C. HILL, M.D., F.A.C.O.G.
Director, The Perinatal Center,
Director, Maternal-Fetal Medicine
Creighton University School of Medicine, Omaha, NE

SUBCUTANEOUS administration of terbutaline is now accepted therapy in the treatment of preterm labor. It has been shown efficacious and safe.[1] The following case demonstrates some problems which developed from an overdosage of subcutaneous terbutaline administered to prevent preterm birth.

Case Report

T.B. is an 18-year-old white female, gravida 3, para 2, AB O, whose last normal menstrual period was unknown. By early ultrasound examination, the pregnancy was 26 weeks gestational age when she presented at the referring hospital experiencing regular uterine contractions every two minutes lasting 40 seconds. Fetal heart rate was 142. The cervix was closed and 50% effaced. While in labor and delivery, she had an increase in uterine activity and the contractions were stronger.

Subcutaneous terbutaline* 2.5 mg. was administered to inhibit labor. Ten minutes later, there were no uterine contractions. The fetal heart rate increased to 153. The patient's vital signs were: blood pressure 112/60 mmHg pulse 120, and respiration 24. She complained of palpitations and nervousness. No further terbutaline was given. One hour after the administration of terbutaline, the patient's blood pressure was 112/50, and pulse 130. Because of preterm labor at this early gestational age, she was transferred to a perinatal center for evaluation and management.

The patient arrived at the tertiary center two hours and fifteen minutes after receiving the subcutaneous terbutaline. She had experienced no further uterine contractions. Admission vital signs revealed: blood pressure 120/60 mmHg, pulse 120, respiration 22. Fetal heart rate was 162. The patient complained of palpitations, mild chest discomfort, and was very anxious. Admission laboratory data revealed: hemoglobin 10.3, hematocrit 31.2, WBC 17.4, with a normal differential. Serum potassium was 2.8, BUN 7, sodium 141, chloride 109, CO_2 22, and blood glucose 122. The patient's decreased potassium was treated by the administration of three solutions of KCl 10 mEq in 50 cc's D5W, each given over one hour. No further terbutaline or other tocolytic therapy was required. Cervical exam was unchanged. Six hours after admission, her symptoms and complaints disappeared. She was observed in the hospital for 36 hours and uterine contractions ceased.

The patient was subsequently readmitted at 30 weeks gestational age to the tertiary care center in preterm labor. The cervix was 2 cm dilated and 60% effaced. Intravenous magnesium sulfate tocolytic therapy was initiated and after the absence of uterine contractions for 24 hours, she was switched to oral terbutaline 2.5 mg every four hours. Tocolytic therapy was continued until 37 weeks gestational age. The patient had an uncomplicated labor and delivered at 38 weeks gestational age a 3300 gm male infant. There were no neonatal complications.

Discussion

The use of subcutaneous or intravenous terbutaline, a beta-adrenergic agonist, as a tocolytic agent is now a popular regimen for treating preterm labor.[1, 2] Although its use is efficacious, complications and problems have been reported.[3, 4]

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*Address reprint requests to: Washington C. Hill, M.D., F.A.C.O.G., Director, The Perinatal Center, Director, Maternal-Fetal Medicine, Creighton University School of Medicine, 601 North 30th Street, Suite #4810, Omaha, NE 68131.

Terbutaline can be given 0.25 mg subcutaneously initially and repeated hourly until contractions have stopped.[1] The same subcutaneous dose has been suggested to be given prior to transfer of a patient to the tertiary care center and at the time intravenous magnesium sulfate tocolytic therapy is initiated.

The patient described received a subcutaneous dose of 2.5 mg, which is ten times the recommended dose (0.25 mg). Terbutaline overdosage has previously been reported but not in the pregnant patient.[5] This medication error could have been very harmful to both the patient and her fetus. The patient demonstrated toxic effects of the drug including tachycardia, palpitation, chest discomfort, anxiety, apprehension, tremor and fetal tachycardia. Subcutaneous terbutaline has an onset of action in ten minutes, with peak activity in approximately 60-90 minutes and a duration of action of several hours.[5] This patient demonstrated side effects from overdosage of the subcutaneous terbutaline but they gradually disappeared. Terbutaline is a selective beta-2 adrenergic agonist. Propranolol, a beta-adrenergic blocker, could be used in treating a patient with terbutaline overdosage and evidence of myocardial ischemia to reverse its toxic effects.[4] The use of propranolol was felt not indicated in this patient. The patient given an overdosage of subcutanous terbutaline can usually be treated symptomatically.

Terbutaline for parenteral use is supplied in one mg per ml ampuls. Each ampul contains four doses. It has previously been suggested that single-dose (0.25 mg) ampuls labeled with the recommended dose would lessen the risk of overdosage when this drug is given subcutaneously.[4] Geigy Pharmaceuticals at this time has no such plans. Terbutaline is available in 2.5 and 5.0 mg tablets. The oral dose is frequently 2.5 mg every three to four hours. This dose should not be confused with the recommended parenteral dose. Subcutaneous terbutaline must therefore be administered with care to the pregnant patient so that medication errors and untoward side effects do not occur.

Summary

Subcutaneous terbutaline is safe and efficacious therapy for preterm labor. Problems from overdosage of this drug demonstrate that it must be administered carefully to the pregnant patient so that medication errors do not occur.

*Brethine, Geigy Pharmaceuticals, Ardsley, New York

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President's Page

HEALTH CARE COSTS

The best bargain available in health care is the office call. Publicity to influence patients to select a Primary Care physician, who can serve as their patient advocate, is in the best interests of both the patient and the physician. Many of my specialist and sub-specialist colleagues have remarked that the referral of the patient from a Primary Care physician, who knows the patient's background and past medical history, facilitates their care and is usually much more cost effective than when the patient comes in without referral. Also, when the care is completed, the consultant can get the patient back to their Primary Care physician for follow-up and health care maintenance, and avoid the high cost of episodic or crisis type health care.

The advances in technology have made the diagnosis and treatment of medical care problems much more reliable, but also very expensive if not appropriately used. Health care economists have shown that there has been an increase in longevity and a decrease in morbidity as technological advances have been made. However, the curve has now leveled off and the studies show that by being selective in the use of laboratory and x-ray, and other ancillary tests, the optimum level of care can be obtained with the use of only 50 percent of the average number of studies currently being ordered for workup of various disease categories. The alternative health care systems have implemented rather vigorous utilization control in an attempt to make savings by reducing the use of ancillary tests. As physicians, we will have to monitor very closely to assure that quality of care for the patient is not being compromised. Implementation of the DRG system has had an influence on the hospitals to tighten utilization control and sometimes the tendency is to discharge the patient "quicker and sicker".

Hiram R. Walker, M.D.

In this increasing atmosphere of cost consciousness, the need for the physician to act as the patient's advocate is becoming evermore clear. The philosophy of the health care team can be very beneficial to expedite the diagnosis and treatment of the health care problems. However, it is essential that the Primary Care physician follow the patient through the maze of the complex hospital procedures to assure both cost effective care and that the patient is ready to be discharged with a plan for continued health care maintenance.

By cooperation of the physicians in the various health care fields, we can assure that our patients will continue to receive quality care at a minimum cost.

We need, more than ever, to have all Nebraska physicians as members of our organization to be able to speak with strong voice for both our patients and our association. If you know physicians who have not elected to join as yet, please try to influence them to sign up. We need them in our association and they need us.

Hiram R. Walker, M.D.
President

The Auxiliary

EATING DISORDERS

Previous studies to identify the incidence of the eating disorder of bulimina and the factors that may be signs of its onset have been done on college-age students. Stephen G. Vincent, Ph.D., recently did a study on 3,823 high school students in the state of Illinois. Of this number, 2,210 were female and 285 were determined to be bulimic.

Most of these females were binge eating and using evacuation techniques on a weekly or more basis and had been exhibiting this behavior for about one-and-one-half years. This is similar to the study of college-age students. All of the normal weight bulimics described themselves to be at least ten pounds to twenty pounds heavier than what they felt for their age, sex, and height.

The findings of this study indicates the average age of bulimic subjects as 16.9 years with an average length of illness 2.3 years. Dr. Vincent felt the focus on their lives became fixed on food and what it will do for them. He felt the emphasis for treatment might do well to deal with basic concerns of adolescence rather than the binge-purge behavior.

He suggested that more research is needed to establish whether or not bulimia is a specific eating disorder or a variant of an existing problem such as depression.

Joan Cahoy

COLO-RECTAL SCREENING

My goal is to reach all Lions Club members in Nebraska with the screening project. I have the consent of the five District Governors so all signals are Go!

Ardis Grace

DRUG ABUSE

All young people have a drug problem— simply because they're growing up in a nation that has a drug problem. All young people have to decide not to use drugs. Our teens are surrounded by drug paraphernalia merchandisers, rock and TV stars, and music lyrics that present an approving attitude toward drugs. Illegal drugs (including alcohol) are dangerous no matter where or when used. As Nancy Reagan has stated, "We're running the risk of losing a great part of a whole generation." Drug use by American kids is higher than in any other developed country; and every year, one million new families face a chemical abuse problem in their homes.

Many kids use drugs to change the way they feel about life, but drugs do more than this—it changes the way they develop emotionally, psychologically, and even physically.

As parents, it is imperative that we become informed parents regarding drugs. This means beginning when our children are in elementary school! You may want to check the curriculum in your school to see what is being taught, and also sponsor informative programs at parent meetings.

This past week, I had an opportunity to attend a drug conference in Omaha. It is frightening to learn that there are 4,000 to 5,000 new cocaine users each week in our country. Because cocaine has such an impact on the brain ("no shut-off switch") many teens are addicts within 6-12 months. The drug is also being used by professionals—doctors, lawyers, stockbrokers, and other white-collar workers—these are people who make an impact upon our society. We must be informed!

CHILD ABUSE

April is National Child Abuse Prevention Month. Nebraska Auxilians were involved in providing financial support for the visit of Spiderman to Kearney, Grand Island, Hastings, Minden, Omaha, and Lincoln, from April 16-19. The Spiderman supplement appeared in the Lincoln and Omaha newspapers on April 20. Although we could not support this financially, Auxilians throughout the state responded to our first newsletter which included an order form for the Spiderman publication. These are being distributed through their spouse's offices or through various community groups.

Prevention is the key to this problem. Support programs for new parents are an especially effective way to begin working, as the first few years of a child's life contain critical periods in terms of development. If these developmental periods are delayed or frozen, the results can be traumatic and long lasting. Many times the lack of knowledge about child development, lack of parenting skills, and isolation or lack of support systems are associated with abusive behavior.

The consequences of physical abuse are greater for younger children. Children ages 0-5 are 28% of the general population, but sustain a disproportionately high 74% of the fatalities. While the average age of children in all child abuse reports is 7.2, the average age of fatalities from child abuse is 2.6. (These are national statistics.)

Nebraska cannot be proud of these statistics:

*In 1985 an estimated 6,808 children were abused in Nebraska.

*Between 1982 and 1985, Nebraska had a 160 percent increase in substantiated cases of child neglect or abuse.

*The number of families in which abuse or neglect was substantiated increased 89 percent in 1984.

*Nebraska is second only to Mississippi with 121 percent increase in child sexual abuse reports in 1984.

*Child abuse is expensive; one month in the Child Protective Service System costs $750, hospitalization of a seriously injured child is $21,300 for one month, and foster care for one child is $400 per month.

Nebraska cannot afford child abuse morally, emotionally, or financially.

Shirley Johnson

* * *

COUNTY AUXILIARY NEWS

Burt County

Burt Washington County Auxiliary held a Health Fair at Blair on Saturday, April 19, from 7 a.m. to 1 p.m. This was the fourth fair sponsored by the Auxiliary; but for the first time, the fair was a part of Health Fair of the Midlands.

An extensive blood profile for participants was available for $15. All other parts of the fair were free: glaucoma, hearing, visual and blood pressure testing, and screening for oral cancer.

Over 650 people attended the Health Fair and 210 persons requested slides for the Colo-Rectal screening.

The success was a community-wide effort and included such groups as the Lions Club, Beta Sigma Phi sorority, Blair Hospital Auxiliary, County Nurses Association, Blair Dental Society, Optimists, Kiwanis, Rotary Club, and the Blair and Tekamah Rescue Squads.

Marilyn Gentry, President

Lancaster County

Lancaster County Auxilians sponsored a successful seminar on Aging, April 5, at Southeast Community College.

The Spiderman publication regarding child abuse was delivered to spouses' offices at the time the Doctor's Day carnations were delivered. The physicians were given an opportunity to purchase a supply for distribution to their patients.

Brenda Decker, President

Lincoln County

The Lincoln County Medical Auxiliary, in conjunction with the Great Plains Regional Medical Center and the Hospital Auxiliary, launched a successful "Buckle Up Babes" car-seat program. The majority of funds were provided by community support of the LCMA's Culinary Arts and Crafts Extravaganza held last fall.

The medical auxiliary initially provided sixteen Bobby Mac car seats to be rented at the Medical Center. The project was so successful that fifteen more seats were ordered.

If you want more information on this program, contact Molly O'Holleran at North Platte.

Molly O'Holleran, President

* * *

MOMSA

The Metropolitan Omaha Medical Society Auxiliary (MOMSA) Health Committee has been working for two years on a program for senior high students on organ donations. The purpose of the program is to educate senior high students (and eventually the general public) on kinds of organ transplants available and how one goes about donating one's organs. The Nebraska Kidney Foundation has been working with the Health Committee on this project ever since its conception.

MOMSA, along with the Kidney Foundation, will be producing an 8-10 minute video cassette with accompanying teacher's guide. The teacher's guide will contain a copy of the video script plus references and resources to which the teacher can refer.

The work of the Committee is at a point where a production company will be selected very soon to start filing the script. The script itself has been written by MOMSA member Nancy Murphy (Mrs. Kevin).

MOMSA is looking at a September 1896 release date with a special teacher orientation session scheduled for August 1986. Omaha Public Schools has agreed to pilot the film in all their senior high schools.

Our future goal will be to see this film available not only for senior high students in Omaha, but for all civic and religious organizations and other high schools throughout the state of Nebraska.

Barbara Goodrich, Chairperson

Creighton University News:

DR. BEVERLEY MEAD, PSYCHIATRIST, WARNS OF ROMANCE'S PITFALLS

A young man's fancy may turn to love in the springtime, but it's easy to get hurt in the game of romance if you don't know the rules, cautions Dr. Beverley Mead, acting chairman of the department of psychiatry and behavioral science at Creighton University.

Many people, especially young people, not only look for love in all the wrong places, but they also choose their partners for the wrong reasons and have unrealistic notions of what true love is, he says.

Although there is no such thing as the "perfect" mate, it is possible to find the "right" mate, according to Mead.

"Certainly, we are capable of finding immensely satisfying partners . . . beautiful relationships, happy marriages. And we see many examples, unfortunately not the outstanding majority of couples," say Mead, who has been married "happily" for 39 years.

Age is an important factor in determining whether a person is successful at choosing a long-term marriage partner, he adds.

"Age makes a big difference. The person who is more mature, the person who is capable of applying judgment to a situation rather than emotion . . . is going to have a better chance" of finding a lasting love.

Intelligence, emotional stability, a good self-image and previous romantic experience also are important, Mead says.

Mead believes most people shouldn't get married until they're at least 21 years of age and have dated 10 or more people. Younger people with limited dating experience often don't know yet what they really want from life or from a marriage partner, he says.

"I don't think most people are capable of understanding love until they're 21. I think love before that is that kind of mad passionate thing that is really better identified as infatuation, " Mead says.

Mature love, by contrast, involves friendship, good communication, caring and sharing as well as passion, he notes.

Although nearly 50 percent of all U.S. marriages end in divorce, Americans probably are doing a better job of finding suitable marriage partners than ever before, Mead suggests.

The divorce rate, however, indicates individuals' expectations of marriage are higher than in the past, and dissatisfied couples aren't staying together as they once did for economic or religious reasons, he says.

"I think probably we're doing a better job of picking mates . . . Right now we're in a shift in our current culture in which youngsters are more cautious about getting married," Mead explains. "The age of first marriages is going up, there's less pressure to get married for the wrong reasons, and our society is much more educated and sophisticated."

Mead offers the following advice to those in search of a mate:

- Women should be wary of men who say they are falling in love with them early in a relationship. For most men, true feelings of love develop gradually and are more likely to occur later in life.

- If your dating partner is divorced, don't be afraid to ask why. While there can be excellent reasons for divorce, it also may be a clue that an individual is less than ideal marriage material.

- There is no such thing as a "right" engagement period. Young lovers less than 21 years old should wait at least a year before tying the knot. For mature persons in their 30s, two- or even one-month engagements might be enough.

- Don't plan on meeting your lifetime mate at a tavern or night club. The odds are against it; most people are looking for a good time and nothing more in these settings. Grocery stores, museums, zoos, political rallies or any places or activities that bring together people with common interests and offer casual contact and conversation are better bets.

- If you're not sure whether it's love or infatuation that you're feeling, ask what you might think of this person if he or she wasn't your partner in romance. Do you respect his or her sense of values, ambitions, views and maturity level? Would you still enjoy talking to and being seen with this person if you weren't romantically involved? If you answer "no" to many of these questions, it probably isn't love.

Finally, don't look too hard for romance. Enduring love has the best chance to develop when allowed to occur and develop naturally. If you lead a full life and go to a reasonable number of social activities, you'll have many opportunities to meet members of the opposite sex.

"The old myth that there's some perfect partner for you, if you just keep looking that you'll find him or her, I think that's nonsense," Mead comments. "I think we're quite capable of being happy with a great number of different partners."

Letter to the Editor

CALIFORNIA DOCTOR SEEKS SURPLUS MEDICAL BOOKS

Los Angeles, CA - Following a trip to China in 1979 where he visited hospitals, medical institutions and met with Chinese doctors, Doctor Jordan M. Phillips, a retired physician, has created at his own expense a non-profit corporation, "Medical Books For China".

While in China he learned that during the reign of the Red Guards, they went on a rampage to stamp out all western culture. Their activities included destroying libraries and burning all medical books. Only a few volumes were saved by brave doctors who hid the books and journals in caves.

During the past seven years Doctor Phillips and his wife, Mary, have made 25 trips to China and have arranged for some 700,000 medical books and journals as well as audio tapes, film and slide lectures to be sent to the Chinese doctors.

The Chinese government has established a distribution committee headed by the Health Bureau and the Medical School at Tianjin and it is charged with the responsibility of overseeing fair distribution of the medical/educational materials.

The freight costs from Long Beach, California are paid for by the Chinese government and shipment from Tianjin is borne by the doctors and medical institutions who order materials through pre-order forms.

Doctor Phillips is appealing for additional support from the United States medical community for more books, journals and teaching materials.

Medical books should not be older than 1960 and journals no older than 1969.

Medical books, journals, audio tapes, films and slide lectures can be donated to "Medical Books For China". Such donations are 100% tax deductible at current market value. It is suggested that a local medical book store be contacted to establish current value.

Local post offices also can provide information on favorable rates for shipping material to Doctor Phillips.

Shipments should be made to:

"Medical Books for China"
c/o Dr. Jordan M. Phillips
13021 East Florence Avenue
Santa Fe Springs, California 90607

Robert M. Garrick
Administrative Director
Forty First Medical Society
233 So. Euclid Ave.
Pasadena, CA 91101
(818) 577-0470

Welcome New Members

Scott D. Bergfeld, M.D.
1219 - 13th
Aurora, NE 68818

David K. Nussbaum, M.D.
3145 "O" St.
Lincoln, NE 68510

David Howe, M.D. (reinstated)
2115 N. Kansas
Hastings, NE 68901

Richard G. Belatti, Jr., M.D.
601 N. 30th St.
Omaha, NE 68131

Patrick J. Bogard, M.D.
601 N. 30th
Omaha, NE 68131

James C. Brown, M.D.
Childrens Hospital
Omaha, NE 68114

Scott Coatsworth, M.D.
650 Doctors Bldg., N. Tower
Omaha, NE 68131

Terence M. Cooney, M.D.
650 Doctors Bldg., N. Tower
Omaha, NE 68131

Susanne E. Eilts, M.D.
650 Doctors Bldg., N. Tower
Omaha, NE 68131

Paul S. Johnson, M.D.
601 N. 30th, #4730
Omaha, NE 68131

Kevin R. Murphy, M.D.
8552 Cass St.
Omaha, NE 68114

R. Coleen Stice, M.D.
219 Doctors Bldg.
Omaha, NE 68131

Michael J. Domalakes, M.D.
10060 Regency Circle
Omaha, NE 68114

Carol A. Drake, M.D.
10060 Regency Circle
Omaha, NE 68114

Dana S. Farris, M.D.
2115 - 14th St.
Auburn, NE 68305

Bobby Abraham, M.D. (reinstated)
1401 E. H St.
McCook, NE 69001

Valerie Johnson-Bailie, M.D.
4009 Avenue B
Scottsbluff, NE 69361

Thomas A. Dennison, M.D.
P.O. Box 1763
Grand Island, NE 68802

Laurence F. Lesiak, M.D.
908 N. Howard, #109
Grand Island, NE 68803

D. Francis Arkfeld, M.D.
8601 W. Dodge Rd.
Omaha, NE 68114

Robert N. Brown, M.D. (reinstated)
5601 No. 103rd Rd.
Omaha, NE 68134

Russell H. Kuempel, M.D.
11440 W. Center
Omaha, NE 68144

John R. Mawk, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Erich W. Streib, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

In Memoriam

> *By medicine life may be prolong'd*
> *yet death*
> *Will seize the doctor too.*
> *—Shakespeare*

E. C. Hanisch, M.D. — (Born January 19, 1883 - died April 20, 1986) — Medical Specialty — General Practice. Doctor Hanisch was a graduate of the University of Nebraska Medical Center in 1918 and practiced in St. Paul, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association.

Olin J. Cameron, M.D. — (Born October 7, 1903 - died March 20, 1986) — Medical Specialty — Dermatology. Doctor Cameron was a graduate of the University of Michigan Medical School in 1928 and practiced in Omaha, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Leona; daughter, Nancy Estabrook of Omaha; son, Roger of Woodenville, Wash.; nine grandchildren and four great-grandchildren.

Coming Meetings

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

TETONS SPORTS MEDICINE CONFERENCE—July 7-10, 1986, Jackson Hole Racquet Club, Jackson Hole, Wyoming. Sponsored by the University of Nebraska Medical Center, Department of Orthopaedic Surgery and Rehabilitation. Division of Sports Medicine. Guest speakers: Oded Bar-Or, M.D., Director of Children's Exercise and Nutrition Center, McMaster University, Hamilton, Ontario. Canada; John A. Feagin, M.D., President, American Orthopaedic Society for Sports Medicine (20 credit hours).

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — JOHN S. LATTA CENTENNIAL LECTURESHIP — August 28-29, 1986, UN Medical Center, Omaha, Nebr. Speaker - Dr. Brynmore Thomas, M.D., B.S., D.Sc., FRS (Edin), Bute Professor and Head of the Dept. of Anatomy and Experimental Pathology, University of St. Andrews, Scotland. Thursday, August 28, 12 noon - Latta Lecture: "OUR INTERFACE WITH THE ENVIRONMENT" - Wittson Hall Ampitheatre, UNMC. Friday, August 29, 12 noon - Medical Grand Rounds: "HEPATIC HAEMATOPOIESIS" - Bishop Clarkson Hospital, Storz Pavilion, Omaha, Nebr. Everyone invited.

ADVANCED TRAUMA LIFE SUPPORT — September 15-16, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

EMERGENCY MEDICINE REVIEW— September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Cocktail Reception - Tuesday, September 30, 1986, 5:30 to 7:00 p.m. - Washington Hilton Hotel, Washington, D.C. - in conjunction with the American Academy of Family Physicians meeting. All alumni, spouses and friends are invited. Hors D'oeurves and Cash Bar.

EMERGENCY MEDICINE REVIEW — October 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Roundup and Reception in Omaha, Monday, October 27, 1986, 6:00 - 7:30 p.m., Red Lion Inn Ballroom; in conjunction with the Omaha Mid-West Clinical Society Postgraduate Assembly. Hors D'oeuvres and Cash Bar. All alumni, spouses, faculty and friends are cordially invited. Followed at 7:45 p.m. with a 50-year Dinner, Nebraska Room, Red Lion Inn. Class reunions will be held in Omaha in late October for classes ending in "6" and "1".

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

LINCOLN GENERAL HOSPITAL

FIFTH ANNUAL CORNHUSKER/CANADIAN CLINICAL CONFERENCE — June 22-27, 1986. Lynn Lake, Manitoba, Canada. Fee: $150.00. For information, contact: Cathy Kinnaman, RN, Education and Staff Development, Lincoln General Hospital, 2300 South 16th Street, Lincoln, NE 68502, (402) 473-5638.

CREIGHTON UNIVERSITY

OFFICE PRACTICE AND MANAGEMENT IN THE 90'S — July 26-August 2, Vail Racquet Club, Vail, Colorado — Fee TBA. Hours TBA.

FAMILY MEDICINE UPDATE — August 29-30. The Lodge at Okoboji, Okoboji, Iowa — Fee TBA. 10 Hours.

FINE NEEDLE ASPIRATION BIOPSY — Sept. 6. Holiday Inn Central, Omaha, Nebraska — Fee $75.00. 3 Hours.

CARDIOLOGY/RHEUMATOLOGY UPDATE — Sept. 18-30. Ireland Study/Tour in cooperation with Trinity College and University College: Co-sponsored with University of Wisconsin and Tulane Medical Center — Fee $400. 36 Hours.

A DAY WITH THE PERINATOLOGISTS — Sept. 20. Marriott Hotel, Omaha, Nebraska — Fee TBA. Hours TBA.

MEDICINE IN THE NINTIES — Oct. 11-17. U.S. Grant Hotel, San Diego, California — Fee TBA. Hours TBA.

OMAHA MID-WEST CLINICAL SOCIETY — Oct. 27-29. Red Lion Inn, Omaha, Nebraska — Fee $160. 23 Hours.

1987

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17. Wyndiam Rose Hall Hotel, Montego Bay, Jamaica — Fee TBA. Hours TBA.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

FIFTH ANNUAL SUMMER MEDICAL SYMPOSIUM: "MEDICINE FOR THE PRACTICING PHYSICIAN" — July 10-13, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education and the University of Kansas School of Medicine, Wichita, KS 67214. Location: Broadmoor Hotel, Colorado Springs, CO. Credit: 15 hrs., AMA Cat 1. Fee: $375.00.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICINE AND RELIGION: ETHICS OF SEXUALITY AND REPRODUCTION — October 21-22, 1986. Sponsored by the University of Kansas Medical Center. Location Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas 66103. Credit: AMA Cat 1, AAFP, SW, CNE. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480

EMERGENCY RESPIRATORY CARE — October 24-25, 1986. Sponsored by the University of Kansas Medical Center. Location: Doubletree Hotel, Overland Park, KS. Credit: AMA Cat 1, CME, AART, CRNA, CNE, MICT, PT. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

AMERICAN CANCER SOCIETY: PEDIATRIC ONCOLOGY SYMPOSIUM — October 17, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103 and the American Cancer Society - Kansas Division, Inc. Credit: AMA Cat 1, AAFP, CNE, SW, PT. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

SCHEDULED MEETINGS

54TH ANNUAL POSTGRADUATE ASSEMBLY — Omaha Mid-West Clinical Society, October 27, 28 and 29, 1986 at The Red Lion Inn/Omaha. For information, please contact: Miss Lorraine E. Seibel, Executive Secretary, Omaha Mid-West Clinical Society, 7363 Pacific Street, #205-B, Omaha, Nebraska 68114.

AMA News Notes

"There's a Great Opportunity For the AMA to be much more proactive now, and for the association to gain a new credibility beyond pocketbook issues," says AMA General Counsel Kirk Johnson, explaining why the AMA is currently involved in four cases before the Supreme Court.

The major case for the AMA is the so-called "Baby Doe" case, in which the AMA argued that the federal government has no right to interfere with treatment decisions made by parents on behalf of impaired newborns. The AMA, along with the American Hospital Assn. and others, is asking the court to affirm the decision made by the U.S. Court of Appeals for the Second Circuit.

That decision enjoined the Dept. of Health and Human Services (HHS) from implementing regulations and investigations with respect to individual treatment decisions. An affirmation by the Supreme Court would put an end to what the AMA calls the "direct, intrusive, and overbearing federal investigations — including 17 on-site inquiries by federal "Baby Doe" squads — in the days, even hours, immediately following the birth of a chld, during a period of maximum stress for families."

The other four cases involve **amicus curiae** briefs filed by the AMA. They are:

— The AMA, along with a coalition of groups that includes the Chemical Manufacturers Assn., the Sierra Club, the AFL-CIO, and the National Assn. for the Advancement of Colored People (NAACP), filed a brief supporting the concept that associations have standing to assert the rights of their members in lawsuits filed in federal courts.

— The AMA is supporting a group of 92 Indiana dentists charged by the Federal Trade Commission with antitrust violations under the Sherman Act. The dentists had refused to submit x-rays to third-party insurers as justification for treatment and reimbursement, claiming that the insurer's review of treatment options based solely on x-rays would interfere with the dentist-patient relationship, and possibly damage the quality of care.

— The AMA asks the Supreme Court to affirm an appeals court ruling regarding the right to judicial review of the statutory and constitutional validity of a regulation promulgated under part B of Medicare.

* * *

Stressing Education And Communication, the AMA is undertaking an ambitious program to inform the public about AIDS, its consequences, and related issues such as screening for the HTLV-III virus. Called the AMA Action Plan for AIDS, the program's goals are to disseminate information to physicians and to establish physicians as the most credible source of AIDS information in the eyes of the public.

"There is a lot of information on AIDS out there, but there is no effective means of communicating this information to the public," says William R. Hendee, Ph.D., AMA vice president of science and technology. "Physicians have a lot of respect in the communities, which makes them a logical voice for disseminating information."

The program, which was approved by the AMA Board of Trustees in February, has as its major component a series of seminars to instruct selected physicians in the medical and health care aspects of acquired immune deficiency syndrome. The physicians also will learn about the non-medical problems associated with AIDS, including: emotional effects, debate over HTLV-III screening, psychological problems for someone diagnosed with AIDS, and the monetary consequences.

The first AIDS seminars will be held in four states in June. These will be prototype sessions limited to about a dozen physicians from each state. Physicians participating in the seminars then will return to their communities and share their knowledge with their peers. Through this spread of information, the AMA hopes to greatly raise physician's levels of knowledge about AIDS.

"Although some physicians have yet to be involved with treatment of an AIDS patient, all physicians encounter requests for information

(Continued on page 7A)

REPORTS OF OFFICERS, DELEGATES AND COMMITTEES

ANNUAL SESSION

April 25, 26, and 27, 1986

(These reports appear as originally submitted. For the House of Delegates deliberations, possible changes, and final action, refer to the minutes which follow these reports.)

REPORT OF THE BOARD OF DIRECTORS

Francis D. Donahue, M.D., Omaha, Chairman; Hiram Walker, M.D., Kearney; Robert F. Shapiro, M.D., Lincoln; Herbert E. Reese, M.D., Lincoln; Donald J. Pavelka, M.D., Omaha; L. D. Cherry, M.D., Lincoln; Richard Raymond, M.D., O'Neill; Harry W. McFadden, M.D., Omaha; Alvin A. Armstrong, M.D., Scottsbluff; Stanley M. Truhlsen, M.D., Omaha.

The Board of Directors presents the following report to the House of Delegates.

(1) MEMBERSHIP RECRUITMENT ACTIVITY: An expanded membership recruitment campaign has been underway since December, 1985 in an effort to attract additional members to the Nebraska Medical Association, the American Medical Association and the appropriate county medical societies. Personal letters, signed by the President of the Association, have been sent all potential members along with a newly prepared brochure describing the benefits of membership. Two follow-up letters have been sent to physicians not responding, and additional mailings along with contact by the county medical society secretary and the NMA Councilor are planned. The results of the effort have been reviewed by the Board and it is felt to be worthwhile.

(2) UNIFIED MEMBERSHIP: The Board reviewed the activities of the Ad-Hoc Committee on Unified Dues along with statistical information developed regarding the total number of physicians in the state, current NMA membership, and current AMA membership. The Board recognized the benefits of membership in the AMA and discussed the fact that these benefits are not generally known by many physicians. It was decided that the issue of unified membership should be tabled until the Fall Session with the understanding that additional information is needed.

It is readily evident to the Board that medicine currently is in a transition and while the county societies and the Nebraska Medical Association function under a unified membership umbrella there would need to be an intense educational effort undertaken prior to proposing a unified concept which includes the county societies, the NMA, and the AMA.

(3) THIRD AMA DELEGATE: The Nebraska Medical Association has been notified that for the second year we have 75% of our members who are also members of the AMA. Consequently, the NMA will have a third delegate at 1986 sessions of the AMA House. The Board selected Doctor Louis J. Gogela to move from his Alternate Delegate position and serve as the third Delegate along with Doctors Carl J. Cornelius and John D. Coe. Doctors Hiram R. Walker and Robert F. Shapiro were selected by the Board to serve as Alternate Delegates, joining Doctor Blaine Y. Roffman in that position.

(4) 1987 DUES INCREASE: The Board has begun analyzing the potential need for a modest dues increase in 1987. The last increase in NMA dues took place in 1984 and it amounted to $20. The Board is making every effort to eliminate the need for an increase by expanding our number of members. The matter will be considered further at future meetings of the Board as finances are monitored and should there be need for consideration of an increase, the matter will be brought to the House of Delegates for its consideration at the 1986 Fall Session.

(5) SCHOOL SPORTS PHYSICALS: The Board considered correspondence and background information submitted by the Scotts Bluff County Medical Society regarding the excess number of sports physicals currently required. The matter was initially reviewed by the Board and submitted to the Ad-Hoc Committee on Athletic Medicine for review and report back. It is felt that the Committee will need to meet with several organizations that affect the number of physical exams that are required in order to gather sufficient information upon which the Association can act.

(6) SERVICES TO SPECIALTY SOCIETIES: The Association currently provides administrative services to five specialty groups: the Nebraska Society of Internal Medicine; the Nebraska Chapter of American Academy of Pediatrics; the Nebraska Academy of Ophthalmology; the Nebraska Radiological Society; and the Nebraska Society of Anesthesiologists. In addition to the services provided directly to the specialty societies, it is felt that the communication link is beneficial to both the Association and the individual societies.

The Board stands ready to consider and respond to items which may be referred to it by the House of Delegates at this Annual Session.

REPORT OF THE DELEGATE TO THE A.M.A., INTERIM MEETING

Your three Delegates and their Alternates represented you at the thirty-ninth Interim Meeting of the American Medical Association House of Delegates in Washington, D.C. in December. The Delegates and the Official Family attended daily breakfast caucuses with other members of the North Central Conference where each issue was discussed in preparation for decision-making. The several Resolution Committee hearings were attended by assignment. All State Associations had their full representative complement in debate on the floor of the House.

The resolution introduced by the Nebraska Medical Association relating to professional advertising, and specifically patient testimonials, was not adopted. It was our thought that the opinion of the Council on Ethical and Judicial Affairs was in conflict with the advertising practice as it appeared in the media. The House determined that this practice was in keeping with the opinion of the Council and that, accordingly, there was no necessity to change that opinion. That decision would be in accord with the tenets of the Federal Trade Commission. That such practice is in poor taste is another matter.

The many issues facing the AMA were approached with determination and with tact, some successfully, others not so successfully. The federal bureaucracy and the political and legal pundits present a formidable foe. Executive Vice-President Jim Sammons announced that the AMA would join the Massachusetts Medical Society to contest in court the matter of the requirement by the State of Massachusetts that a physician must accept Medicare assignment for licensure to practice.

The issue which received the widest national publicity and which probably stimulated the least debate, concerned the stance the AMA adopted to forbid tobacco advertising by all the media. The flurry of publicity was short-lived, but points up the type of issue the media select to purvey to the public.

(1) Substitute Resolution #58, responded to a commonly-voiced complaint relating to the Attestation Statement:

"RESOLVED, that the American Medical Association continue vigorously to oppose and seek repeal of the unnecessary Attestation Statement on hospital medical records of Medicare beneficiaries and in doing so, call upon all components of the federation, together with the AMA, to encourage physicians to contact members of Congress to support such repeal."

Only at the level of personal effort will this problem be corrected.

(2) The Medicare Fee Freeze was castigated thoroughly. The following resolution was adopted:

"RESOLVED that the AMA intensify efforts to increase public awareness of the deleterious effects of the Medicare Fee Freeze and other Medicare benefit curtailments, on the continued accessibility for Medicare-eligible citizens to the physicians of their choice."

(3) The problems surrounding Professional Liability Insurance received thorough airing. The Committee on Professional Liability and the Council on Legislation were commended for their extensive work in responding to the profession's call for relief from the pressing problem of liability. This was considered a matter of high priority in order that care may continue to be available to the public. The House was assured that the problem of medical liability will continue to receive the highest priority of the Association. Strong testimony was voiced in support of the development of coalitions to achieve tort reform. Other suggestions were presented. The proposals for reform were referred to the Board of Trustees for amalgamation into a directed and concerted solution to the problem which now is out of control.

(4) Resolution #39, concerned the payment of fees for services when fulfilling third party payor requirements. This resolution proposed that the AMA adopt the position that a physician is entitled to charge a fee to third party payors for administrative services imposed by the third party payor. This included pre-admission and pre-surgical authorizations and the completion of any form required before payment was approved. It was evident that the problem was a most complex one. Testimony hefore the Reference Committee was very comprehensive indicating that the issue was of urgent and serious proportions. Adoption of the resolution would have necessitated changes in the ethical opinions necessary to conform with the position described. This resolution was referred to the Board of Trustees for further study and with a report to the House of Delegates at the coming Annual Meeting.

(5) Report A of the Council on Medical Service concerned second opinion and pre-admission review programs. The report recommended assessment of the actual cost-savings of these programs and opposed blanket hospital pre-admission review. Speakers appearing before the Resolution Committee strongly stressed that these programs should be voluntary in nature. It was emphasized that the issues discussed in the report will require continued study on the part of the Council on Medical Service. The report was also referred to the Board of Trustees for further recommendation. The complex issue of the "gatekeeper" system was addressed in Resolution #27. The American Medical Association is to undertake the study of the "gatekeeper" system and its advantages and disadvantages and report to the House of Delegates at the 1986 Annual Meeting. The concept of a gatekeeper other than a physician was offensive.

(6) The Virginia Delegation introduced a resolution requesting that the American Medical Association study the feasibility and need for a thorough review and revision of the Health Care Financing Administration/American Medical Association Surgical Screening Criteria. This resolution was adopted and the opinion will be announced to the House at the Annual Session.

(7) Report F of the Council on Medical Services described the Council's investigation of Medicare regulations for skilled nursing home facilities and recommended that the AMA seek modification of the "conditions of participation" to permit more flexibility in scheduling physician visits to nursing home patients and more flexibility in Medicare requirements regarding the ordering of drugs and other therapy for these patients.

(8) Peer Review received airing. The House of Delegates restated the policy of the American Medical Association to encourage peer review of the performance of hospital medical staff physicians, which is objective and supervised by physicians. It was resolved also that the AMA will study the appropriateness, legal implications and indications of **outside** peer review of hospital medical staff performance utilizing the services of physicians other than the hospital's own organized medical staff. The response to the resolution will be reported to the House at the Annual Meeting.

(9) Resolution #122, calling for AMA review of all Health Care Financing Administration rules and regulations concerning PRO's was adopted. Specific recommendations are to be made to HCFA to assure that the quality and accessibility of health care provided to patients will not be affected adversely. The House restated the AMA opinion that for peer review to be effective, data must be kept confidential. The Association must take whatever steps are mandated to implement this policy. The AMA was instructed to pursue whatever statutory or administrative changes are necessary to make clear that **voluntary** peer review fee disputes among physicians, patients and third party payors, does not violate the Federal Anti-Trust laws as long as the review is effected with prior written consent of the parties to the dispute. A resolution that the AMA establish a "pre-certification monitoring project" to study potential savings versus detrimental effects of elective admission pre-certification was referred to the Board of Trustees. The AMA also is to continue monitoring and studying the geographic variations in the use of health care services. A resolution requesting extensive restructuring of the Medicare law was referred to the Board of Trustees.

(10) The American Medical Association is actively involved in the development of a new relative value scale for physicians services. The Board of Trustees will continue to inform the House of Delegates on the progress of the AMA/Harvard Relative Value Project. The Board asserted that the entire federation would be kept fully apprised of the developments in this area. Revised Resolution #71 concerned with payment for physicians services under Medicare was adopted. This resolution proposed that the American Medical Association support payment for physicians services under Medicare to include an indemnity system based on a defined schedule of allowances. The patient would be indemnified for covered services and maintain the rights of physicians and patients to enter into individual contracts with physicians establishing their own fees and agreeing or not agreeing to accept amounts identified by the Schedule of Allowances as payment in full. The Board of Trustees presented a progress report on the AMA project monitoring DRG's

with assurance that further continuing study of the prospective pricing system will be under close survey.

(11) Resolution #92, relating to the restoration of care to Medicare was adopted. The American Medical Association again reminds and encourages physicians to document and collect instances when hospitalization and medical care have been improperly curtailed or denied because of the constrictions imposed by the prospective pricing system and other improprieties stemming from the DRG's. Such summary information would also be made available to the respective state and county medical societies. Concern was also expressed about the impact of prospective payments on the cost reimbursement for those patients enrolled in clinical research.

(12) Resolution #7 asked that AMA express contention that the emphasis of Health Fairs should be primarily informative and educational rather than diagnostic. The resolution stressed further that the Health Fairs should emphasize the importance of establishing a doctor-patient relationship. The House reiterated its condemnation of both amateur and professional boxing, a sport in which the primary objective is to inflict injury. This stand is proper in the light of the fact that the profession is charged with the responsibility of protecting the health of the individual when humanly possible.

Doctor Harrison L. Rogers, in his Presidential Address spoke encouragingly and optimistically regarding the path medicine is to take into the future despite the disruptive forces now bearing upon the practice of medicine. He pointed to the spectacular improvements in drugs and surgical procedures abounding today. He pointed to the superb training medical students are receiving. He predicted that the doctor of the future will provide-a level of care that our dreams today cannot envision. He described the AMA as a "stronger Association". He stressed, however, the need for strengthening the Association by encouraging expansion of our ranks. He encouraged continuing effort at unified membership. His words deserve serious thought.

The Nebraska Medical Association was ably represented on the floor of the House by Carl Cornelius and Jack Coe and by the alternates, Bud Roffman, Francis Donahue and Robert Shapiro.

Respectfully submitted,
Louis J. Gogela, M.D.
AMA Delegate

REPORT OF THE UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE

It is a great pleasure for me to prepare my first written report to the Nebraska Medical Association. I accepted the position of Dean of the University of Nebraska College of Medicine just a little over one year ago and moved to Nebraska about nine months ago. I accepted the position and was excited about the prospects for continued development of the College of Medicine, one important factor being the excellent relationship the medical school has with practicing physicians and organized medicine. During the past year nothing has happened which has disappointed me or led me to believe in any way that I made an incorrect decision.

It has been a much busier nine months than I had anticipated, and I shall briefly mention some of the more important events:

It is clear that there is a decline in the pool of applicants for medical schools. This is occurring nationally as well as in Nebraska. If there is not a sufficient number of qualified applicants to the University of Nebraska, I shall recommend a further diminution of class size, even though we are already one of the leaders among medical schools in reducing class size.

There are interesting changes in basic science education. It has become clear that the emphasis on lectures, the memorization of myriads of facts, with regurgitation on periodic machine-graded exams is not the ideal method. Therefore, we are moving towards reducing the number of lecture hours, using more small group discussions and independent learning. We are exploring the possibility of utilizing simulated patients for evaluating clinical skills. These experiments and changes in educational techniques will be exciting to watch over the next several years.

Dr. William Ruegamer, after 17 years as Chairman of the Department of Biochemistry, stepped down last year. Dr. Ruegamer served this institution extremely well for many years in several different capacities. He certainly shall be missed. A search committee being chaired by Dr. William Berndt has identified several outstanding candidates to replace Dr. Ruegamer. In the interim Dr. Kirk Phares has done an outstanding job leading that department.

Clinical education of medical students and residents has been adversely affected by the changes in reimbursement for inpatient care. There are fewer patients in hospitals, they are sicker, and they stay for a shorter length of time. A clear solution for this medical education problem has not been obtained at the University of Nebraska, nor nationally. A partial solution is to shift some of the education to outpatient sites. Because of this, the physician faculty feel we must make our outpatient facilities more efficient, and we must be able to respond to alternative health care delivery initiatives in a more expeditious and unified fashion. Therefore, we have formed a Clinical Practice Board which will be responsible for running the University of Nebraska Outpatient Services, and for negotiating for services with other delivery systems, such as HMO's, PPO's, etc.

Late last year, Dr. Jan Smith, Chairman of the Department of Anesthesiology, resigned to take a position in Ohio. A new chairman of that department should be in place by the beginning of the next academic year.

Dr. Carol Angle, Chairman of the Department of Pediatrics, stepped down last autumn, to devote herself fulltime to teaching and research. A search committee under the chairmanship of Dr. Layton Rikkers has identified several outstanding candidates for that position.

As noted in last year's report to the NMA by Dr. Dobry, Dr. Merrill Eaton stepped down as Chairman of Psychiatry. The reorganization of the Nebraska Psychiatric Institute, as summarized by Dr. Dobry, has proceeded smoothly, due to the outstanding cooperative endeavors of the administration of the University Hospital, especially Mr. Robert Baker, the newly named Chairman of the Department of Psychiatry, Dr. Frank Menolascino, and the faculty and staff of NPI.

In the clinical and research areas, several exciting programs have made great strides. A few examples are research on the virology and immunology of the Acquired Immune Deficiency Syndrome, under the leadership of Drs. David Volsky and David Purtilo; cancer causation, under the leadership of Drs. Samuel Cohen, Leon Ellwein, and Edward Bresnick and his colleagues at the Eppley Cancer Institute; use of monoclonal antibodies in the treatment of cancer, under the leadership of Dr. Margaret Tempero: the liver transplantation service, under the leadership of Dr. Byers Shaw, and many, many others too numerous to mention.

Once again, I should like to express my appreciation to the leadership of the Nebraska Medical Association for helping to make my first year as Dean such a satisfying one. I look forward to many years of successful interaction with the NMA and its membership.

Respectfully submitted,
Robert H. Waldman, M.D.
Dean

REPORT OF THE STATE DEPARTMENT OF HEALTH

1. **Environmental Health** - There is increasing evidence that efforts should be sustained and even increased to maintain surveillance on drinking water and indoor air quality in Nebraska. This is of particular importance in those areas which have experienced major changes in farm practice through use of advanced technology. Currently, 30 municipal water supply systems are not in compliance with Safe Drinking Water Standards for nitrate. This is an increase of 5 from the 25 not in compliance in March. 1985. A survey of 440 private water systems in Central Nebraska last year also produced additional evidence of high nitrate levels as well as the presence of pesticides and radiation (Gross Alpha). Results of this survey are now being analyzed and will be published in report form in May, 1986. Another survey of private homes (100) in Nebraska is currently underway to measure RADON levels in the air. Radon is considered to be the second most common cause of lung cancer and has been shown to be a problem in other areas, especially in energy efficient homes. Results of this survey will be available soon.

In addition to maintaining surveillance on water and air quality, the Department has responded to a number of requests regarding adverse environmental conditions and health effects. Typical of these were the Kearney Industrial Park, Grand Island (ordinance plant), and Hastings (Ammunition Depot). These investigations and others of lesser magnitude have included site visits, local hearings, and other information gathering activity. The Department has been strengthening its capabilities in the area of toxicology and epidemiology to provide a more effective response mechanism to these requests. This response capability should be further enhanced by the availability of a statewide cancer registry which we believe can be possible through the joint efforts of the Nebraska Medical Foundation and the Department of Health.

2. **Regulation** - Last December, results of the LB 407 process (review of licensure requests) in the form of reports and recommendations were presented to the Legislature. This event culminated a major effort involving six technical committees responsible for the review of eleven applications. Concurrently, the Bureau of Examining Boards provided other assistance by performing detailed analysis of all proposals for technical soundness and encouraging 407 proponents to rewrite their bills using procedures and approaches consistent with the Uniform Licensure Law. To date the Legislature has passed two of the eleven bills, which will license respiratory therapists and allows optometrists to use therapeutic eyedrops. As this is written, bills to regulate athletic trainers, social workers, dieticians, and counselors are still alive. While the 407 process was frustrating and certainly did not take the politics out of health regulation, I do believe it provided additional focus on the health issues involved.

Changes within the Department have been made and are being planned to accommodate the increasing work load for the Bureau of Examining Boards. An Associate Director for Investigations has been added as has an Assistant Attorney General (assigned to the Attorney General's Office) to work with the Bureau of Examining Boards. All of the health professional boards including the Board of Medicine and Surgery have expressed frustration at the inability of the state to take actions against those few practitioners who deliver consistently inappropriate care. These changes should go a long way towards solving these frustrations.

As of May 1, 1986, the Department will be using new procedures called the "Long Term Care Survey" for surveying nursing homes in Nebraska. The new procedure, as developed and mandated by the Health Care Financing Administration, establishes a patient oriented process to establish measures relative to outcome rather than being paperwork oriented. Staff are now being trained in the application of these procedures which require more in the way of observation and interview skills. It is clear to me that much clarification is needed for issues surrounding the appropriate level of care for patients receiving oxygen and passive feeding in nursing homes.

3. **Health Resources Development** - In February, the Department receiving 63 research grant applications for funding available through the Nebraska Smoking Disease and Cancer Research Program. These applications are subject to a two step review process, and it is estimated that 35-40 projects will be funded again this year. While most of the projects are basic research relating to the cause and cure of cancer, we are continuing to encourage more projects related to the prevention of cancer and of smoking. In a related effort, the Department, in cooperation with the University of Nebraska Medical Center, recently submitted a proposal to the National Institutes of Health for supporting and evaluating the current Lymphoma Project of UNMC and for expanding the scope of the project to other cancers when appropriate.

The Department continues to plan for the development of health resources, including manpower and facilities. Over the past few years, 10-15 National Health Service Corps physicians have been serving in designated shortage areas at any given time. The Department has been involved in this effort by identifying priority areas, matching physicians to communities, and monitoring the practices at NHSC sites. In addition, three physicians, with obligations to the Nebraska Medical Student Loan program, are now serving in rural communities, and this number should increase significantly in future years as residency programs are completed. Recently too, an average of 1-3 physicians per month are establishing practices in the state through participation in the Nebraska Physician Referral Service.

Although the issue has been debated, I am convinced that we have passed the point where we can provide all of our medical technology to all who could benefit. The resulting rationing raises many ethical issues. The Board of Health and The Statewide Health Coordinating Council, in cooperation with Blue Cross/Blue Shield of Nebraska, Nebraska Medical Association, and the Nebraska Hospital Association, have recently sponsored a series of forums on "Ethical Concerns in Health Care Rationing". These forums (7) have been drawing 70-150 participants per event. A videotape produced at the state level forum last fall is now available at the Department on a rental or purchase basis.

4. **Personal/Community Health** - Disease Control efforts in 1985 concentrated on Sexually Transmitted Diseases (STD), tuberculosis, rabies in animals and immunizations. The AIDS case count to date is one in 1983, 2 in 1984, 7 in 1985, and 3 to date in 1986. An application to the Centers for Disease Control is expected to provide funds and technical assistance to develop and conduct an education and prevention program.

Twenty-three tuberculosis cases were recorded in 1985. Routine testing in hospitals and nursing homes is no longer required and, for this reason, antigen is no longer supplied by the Department.

Immunization levels continued to improve in Nebraska schools but the cost of vaccines is sky-rocketing.

Growing interest in the need for and methods of changing unhealthy lifestyles continue to give the health promotion program a high priority. Through such efforts a State Health Promotion Plan has been adopted and current activities are being focused on older persons, teenage pregnancies, tobacco use, and seatbelt awareness on a statewide basis. Also, a State Employee Wellness Program has been initiated for a worksite setting, and recently attention has been given to safety conditions at the worksite. Local attention to this effort is evidenced by the existence of community coalitions in Omaha, Grand Island, and Beatrice.

It is increasingly clear to me that smoking is the most important preventable health problem in Nebraska. While the sale of cigarettes generated $1.5 million for cancer research, it also accounts for over 300 million dollars of health care costs.

Respectfully submitted,
Gregg F. Wright, M.D.
Director

REPORT OF THE NEBRASKA MEDICAL FOUNDATION, INC.

LOAN AND SCHOLARSHIP PROGRAMS

The Foundation continues provision of services to medical education and research to the medical community in Nebraska. We are pleased to be of continued assistance to the medical students who need financial assistance both during and after their educational process. Over the past year, the Foundation has provided $38,700 in new loans to students and residents.

The balance of loans outstanding which the Foundation underwrites, is reported at $293,029, for students and residents who have completed training. For those students still in training, we have $74,000 currently outstanding in loans.

The Foundation continues to be available for financial assistance to the students during the coming year, and we are pleased to report a total of $8,015 that has been received over the past year from physicians and auxiliary members.

We are also continuing on a yearly basis the provision of scholarships to medical students submitting projects in cancer and heart research. Selected students receive a check for $1,000 at the beginning of their project and an additional $1,000 at completion. The Foundation will again present such awards at this Annual Session to students from both medical schools.

TUMOR REGISTRY

Important legislative action was taken in the 1985 Legislature that will lead to the state-wide implementation of the Nebraska Tumor Registry program.

Through the cooperative efforts of the Nebraska Medical Association, the Nebraska Hospital Association, the State Department of Health and Senator Vard Johnson, legislation implementing the Tumor Registry law plus funding was passed. Under this legislation, all hospitals will be participating in the program. A portion, depending on bed capacity, will receive assistance from the Department of Health. The bill requires that the existing state-wide tumor registry in Nebraska be utilized to provide studies and information needed by the Department of Health.

This will be a unique private/public relationship and will insure that the registry program in Nebraska will be standardized using the program developed by the NMA Ad-Hoc Committee on Tumor Registry and funded by the Foundation. The effort to develop a state-wide tumor registry first began in May of 1981. Further reports will be forthcoming from the Ad-Hoc Committee.

Respectfully submitted,
Howard Dinsdale, M.D.
President

REPORT OF THE NEBRASKA FOUNDATION FOR MEDICAL CARE

On behalf of the Foundation, I am pleased to submit this progress report of activity since the 1985 Fall Session.

NFMC has now concluded nineteen months of operation. During this period of time, some changes have taken place in the implementation of the PRO contract. Most of these changes have been necessitated by modifications of rules and regulations. The Foundation has made every effort to implement these changes in a positive manner.

The support of physicians throughout the state is an essential ingredient to carrying out the functions and responsibilities of this program. There has been continuous diaglogue between the Foundation, physicians, and hospitals on specific cases and hopefully through this process a better understanding is provided to all who are involved. We fully recognize that not all actions or decisions made by the Foundation will be agreeable to all parties. However, the Foundation stands ready and willing to work in a cooperative atmosphere in arriving at equitable solutions.

An item that needs clarifications is the mailing of the NFMC newsletter. Several inquiries have been received expressing concern that the NMA is absorbing the cost of these mailings as they do arrive on your desk in the NMA evelope. At the present time the Foundation does not have mass mailing capability and these services are provided by the NMA headquarters office. All costs for this service including material and labor is paid for by the Foundation.

For your information, information on data that relates to the operation of the program since October, 1984, is being included in the following paragraphs.

Overall there has been an 11% reduction in admissions per 1,000 since the program became operational January 1, 1985.

At the time of the fifteen month evaluation, the Foundation had met the Quality objectives of reducing by 50% the incidence of nephrotoxicity in patients receiving aminoglycoside therapy; . . . reducing by 5% the death rate for patients with acute myocardial infarction; . . . reducing unnecessary surgery or other invasive procedures by 5% i.e. permanent cardiac pacemaker implantations. The results of the two other quality objectives, reducing unnecessary readmissions with 7 days by 50%, and reducing post operative infections following class 1 procedures, will not be known until the end of the contract period, September 30, 1986.

As of this date, the Foundation has met the Utilization objectives established. Those include: reduce admissions for procedures that could be performed on an outpatient basis, reduce the number of inappropriate or unnecessary admissions for specific diagnosis related groups (DRGs), reduce the number of inappropriate or unnecessary admissions by specific provider or hospital.

Reconsiderations are also an important function of the program. This permits physicians, hospitals or Medicare patients to request reconsideration of a determination made by the Foundation. Such review is done by a three-physician committee. In 1985, and the first quarter of 1986, a total of 1295 cases were reconsidered. Of that number, 513 were reversed and 782 were upheld.

In conclusion, I want to assure you the Foundation is making efforts to carry out the parameters of this program in a manner that provides quality care in a cost effective manner. This program is keyed to physician participation and through the effective utilization of these services, patients are receiving the care that is needed and our peer review activity is carried out to reflect that goal.

The Foundation continues to be ready to work in a cooperative atmosphere.

Respectfully submitted,
Herbert E. Reese, M.D.
President

REPORT OF THE COMMISSION ON ASSOCIATION AFFAIRS

Joe D Coe, M.D., Omaha - Chairman; R. A. Blatny, M.D., Fairbury; Bernard Kratochvil, M.D., Omaha; Arnold W. Lempka, M.D., Omaha; Walter O'Donohue, M.D., Omaha, Herbert E. Reese, M.D., Lincoln; Joseph E. Stitcher, M.D., Lincoln, R. C. Weldon, M.D., Nebraska City; Don Graham, Omaha.

The Commission devoted its meeting time to a discussion of the charge given it by NMA President Doctor Frank Donahue. He had suggested that thought be given to the many advantages that exist for members of the Nebraska Medical Association.

It was noted that there were already in existence considerable membership benefits. The term life insurance policy through Sentry Insurance, the Blue Cross/Blue Shield group policy of health insurance, the I.C. Systems collection agency, the contract analysis service, and many group travel programs.

The relationship between the NMA and the St. Paul Insurance Co. in regard to professional liability insurance was reviewed. Although the availability of professional liability insurance through St. Paul cannot be limited to NMA members, the input that the NMA has in the St. Paul Co. is considerable. Company representatives present valuable data to an NMA committee annually. One of our members serves in an advisory capacity with the insurance company.

One of the newer requirements which is being apparent, is insurance coverage for credentialling committees of the hospitals. In one instance, a credentials committee is being sued for not granting staff membership. The NMA should be prepared to advise credentialling committees as to the need and availability of such insurance.

One of the most popular services provided by the NMA last year was the availability of contract analysis. Since many physicians are contemplating changing their practice patterns by participation in one or more of the alternate health care delivery systems, this service can prove invaluable. When a physician has been offered a contract proposal, he can forward it to the NMA who then have it reviewed by legal counsel. The opinion will not encourage or discourage the contract but point out the weakness and benefits. There is no charge to NMA members for this service.

Although the possibility of developing our own travel programs was discussed, it was decided that our member population base was too small to prove effective. In that regard, then we would be well advised to continue our relationship with the travel programs of the North Central Medical Conference.

The impact of computers on life styles and medical practice was discussed. It has been suggested that a computer network be established in the state linking physicians offices, clinics, and hospitals. Certainly this method of communication would be very desirable if and when all doctors have the equipment available and the cost becomes more reasonable. At any rate, the NMA must continue to monitor and advise doctors in this endeavor.

It was decided by the Commission that an attractive pamphlet carrying information on Association services should be devised and provided to the membership, and particularly to the new members. Hence, we recommend that the Board of Directors authorize and provide for this.

The Auxiliary was represented on our Commission by Mrs. Leslie Grace and Mrs. Robert Kruger who said they too, like the NMA, are working diligently on membership recruitment. They also noted that the Auxilary had raised $4,000 for AMA-ERF, and that other health projects are under way. They have also initiated a lottery during the Annual Session to raise funds for the Health Gallery.

We are pleased to announce that Mrs. Robert Kruger, the President-Elect of the Auxiliary, has been selected to serve on the AMA Auxiliary Long Range Planning Committee.

REPORT OF THE COMMISSION ON MEDICAL EDUCATION

Frederick F. Paustian, M.D., Omaha - Chairman; Robert L. Bass, M.D., Elkhorn, Patrick E. Brookhouser, M.D., Omaha; Christopher P. Crotty, M.D., Omaha; Charles F. Damico, M.D., Hastings; Charles A. Dobry, M.D., Omaha; A. Dean Gilg, M.D., Lincoln; William E. Lundak, M.D., Lincoln; Richard L. O'Brien, M.D., Omaha; Dwaine J. Peetz, Jr., M.D., Omaha; Herbert E. Reese, M.D., Lincoln; Mary Kirker, Omaha.

The Nebraska Medical Association Commission on Medical Education has been very active during the past six months undertaking a major reorganization of the Commission's primary activity on accreditation of continuing medical education sponsors within the State of Nebraska.

A manual has been prepared entitled "Structure and Function of the Commission on Medical Education." It is comprised of the documents which relate to the Commission's activity for accreditation of sponsors of continuing medical education programs within the State of Nebraska. It includes specific information for the sponosrs of the program as well as for the site surveyors who function on behalf of the Commission by reviewing the prorams. A copy of our manual will be provided to the House of Delegates' Reference Committee for review and discussion as the Commission requests House of Delegates' approval of this document at this time. Should a delegate wish a copy for review prior to the Annual Session, the NMA office will provide one.

The structure and function manual is in accordance with the Accreditation Council on Continuing Medical Education requirements for accreditation of sponsors of continuing medical education on a scheduled basis for the year 1986. It is anticipated that each of the six sponsors who have requested accreditation will have their programs reviewed by June of 1986.

All subsequent sponsors requesting accreditation will have been apprised of the new accreditation process and will be provided the necessary instruction, statistical and narrative report forms to facilitate the submission of their programs' documentation for review.

The current structure of the Commission and its site surveyors will permit timely review of all submitted applications for accreditation.

REPORT OF THE COMMISSION ON PUBLIC AFFAIRS

Rodney S. W. Basler, M.D., Lincoln Chairman; Herbert D. Feidler, M.D., Norfolk; Edward E. Gatz, M.D., Omaha; Donald T. Glow, M.D., Omaha; John J. Hoesing, M.D., Omaha; Roger P. Massie, M.D., Plainview; Donald E. Matthews, M.D., Lincoln; C. Lee Retelsdorf, M.D. Omaha; Harlan C. Shriner, M.D., Lincoln; F. Thomas Waring, M.D., Fremont; Beth Kollars, Omaha

Promoting the Physician as Patient Advocate

The operating premise for the Commission on Public Affairs of the Nebraska Medical Association remains that "the physicians of this state are continuing to do their jobs well, and the people need to be told about it". During this period of "medicine in transition", patients are more eagerly looking for a health care advocate than ever before. Only the physician has the combination of training, experience, information and compassion to serve in that role.

The Commission is determining those positive attributes of which we, as members, wish to make the public especially aware, and presenting these positive accomplishments to the general public in such a way as to stimulate their support.

Current activities of the Commission aimed at improving public relations through gratuitous public service include the preparation and distribution on a regular monthly basis of "Health Tips" and other news releases which describe new medical findings in terms easily understood by laymen. These short subjects are released to local newspapers and radio stations across the state.

Newspapers will again receive copies of the NMA President's annual "State of the Health" report which is produced for media representatives. Radio stations received sixteen 30-second recorded "spots" on health items by NMA President Doctor Donahue which they often use. In addition, the Commission helped coordinate member participation in the televised "Health Line" series, and secure appropriate spokespersons for conferences and media interviews.

New programs which have already been undertaken by the Commission in the direction of internal relations include Nebraska Medical Journal articles, informing the NMA commission, committee and task force activities. An educational program aimed at members of the medical community who have not yet joined the NMA is progressing from the planning stage.

A number of new projects have been initiated which are intended to advance the concept of the physician as patient advocate among the general public. Included in these is the promotion of fitness, good health habits, and the attitude of wellness through news releases. Better exposure to the press of selected Nebraska Medical Journal articles, including interviews with the authors, is expected to both increase lay interest and awareness and stimulate more state physicians to become contributors. A brochure explaining the various forms of health insurance and distribution systems has been made available to NMA members for patient distribution within the last year.

REPORT OF THE COMMITTEE ON HEALTH PLANNING

C. J. Cornelius, Jr., M.D., Sidney Chairman; Gordon D. Adams, M.D., Norfolk. Lewiston W. Birkmann, M.D., Lincoln; James S. Carson, M.D., McCook; Chris C. Caudill, M.D., Lincoln; Allen D. Dvorak, M.D., Omaha; Dale W. Ebers, M.D., Lincoln; Louis J. Gogela, Jr., M.D., Beatrice; Duane W. Krause, M.D., Fremont; Roger D. Mason, M.D., Omaha; Donald F. Prince, M.D., Minden; C. Lee Retelsdorf, M.D., Omaha; Thomas Wallace, M.D., Gordon; Mark Pitner, Omaha.

No meetings of the Committee on Health Planning have been held since the Fall Session. However, the NMA acted as a contributing sponsor to a conference hosted jointly by the State Board of Health and the Statewide Health Coordinating Council for Health Planning on the "Bioethics of Rationing of Health Care" on October 24, 1986. This conference featured Dr. Norman Daniels, Professor and Chairman of the Department of Philosophy of Tufts University; Clark Havigurst, J.D., Professor of Law at Duke University and Professor of Community Health Science at Duke University Medical Center; Leo Henikoff, M.D., President of Rush University Medical School and CEO of Rush-Presbyterian-St. Luke's Medical Center and a member of the AMA's Council on Ethical and Judicial Affairs; and David M. Kinzer, Past President of the Massachusetts Hospital Assn., past executive vice-president and CEO of the Illinois Hospital Assn. and visiting lecturer of the Harvard Schools of Medicine and "Public Health". These highly qualified individuals responded to a set of questions compiled by a steering committee, which included three NMA members of the SHCC, which attempted to cover most of the issues faced by the health care sector with increasingly limited resources. The conference was held at the NETV station and was videotaped and a 35mm video tape is now being used as the centerpiece in a series of meetings held over the state in discussing this important issue. This videotape will then be made available to service clubs, extension clubs, church groups, etc. in an attempt to stimulate discussion and public education regarding this issue. It is recommended that the NMA purchase a copy of this video tape, the cost of which will be very nominal, and make it available to county medical societies and auxiliaries. A somewhat similar panel was presented at the interim session of the AMA in Washington, D.C. in December. In your Chairman's opinion, the Nebraska conference was superior in many respects.

Because of the time involved in the arrangements for the October Conference and the production of the video tapes and regional conferences and the SHPDA's involvement in the activities of LB 407, the time table for the new editions of the State Health Plan has once again been put back. However, most of the Chapters of the preliminary draft have been completed and reviewed by the plan development committee of the SHCC and should be approved for release for public review and comment by September of this year. Your Chairman, who has also been the Chairman of this plan development committee since 1977, has completed his service on the SHCC but will continue his activities in health planning as a member of the Panhandle Area Health Advisory Committee. As of this writing, the new appointments have not been announced. NMA members continuing to serve on the SHCC will be Roger Mason, Warren Bosley, Allen Dvorak and John Campbell.

Congressional Authorization for continuing health planning runs out in September of this year and the prospects of new legislation are somewhat tenuous at present. It is conceivable that most, if not all, of the Federal Funds for Health Planning could cease to exist before this year is over. What impact that would have on the health planning process in Nebraska remains to be seen.

Your committee will continue to keep abreast of health planning issues as they develop.

REPORT OF THE AD-HOC COMMITTEE ON GERIATRICS

Richard A. Hranac, M.D., Kearney - Chairman; Ronald L. Asher, M.D., North Platte; J. Whitney Kelley, M.D., Omaha; Richard B. Peters, M.D., Omaha; Jane F. Potter, M.D., Omaha; William J. Reedy, M.D., Omaha; John A. Ursick, M.D., Omaha; Vernon Ward, M.D., Omaha.

The Ad-Hoc Committee on Geriatrics developed out of a concern for geriatric care in Nebraska, in particular as it relates to new federal reimbursement programs. The Prospective Payment System and its implementation seemed to change priorities in the care of the elderly. Therefore, Doctor Donahue appointed an Ad-Hoc Committee on Geriatrics.

The committee has met once. A variety of issues in geriatric care have been explored. A questionnaire was subsequently formulated to assess the affect of the Prospective Payment System on physician's practices and hospital care for the aged in Nebraska. The questionnaire is presently in the process of being evaluated. Depending on the results of the information collected, the Geriatrics Committee will try to formulate a statement and possibly direct policy for the Nebraska Medical Association in specific areas of geriatric care.

I hope that this will suffice to describe our activities to date. Again, if there are additional questions or other concerns, be sure to let me know.

REPORT OF THE AD-HOC HEALTH GALLERIES COMMITTEE

Russell L. Gorthey, M.D., Lincoln - Chairman; Mrs. Orin R. Hayes, Lincoln; Mrs. Glen Lau, Lincoln; Mrs. Richard C. Olney, Lincoln; Richard C. Olney, M.D., Lincoln; Mrs. John L. Reed, Lincoln; John L. Reed, M.D., Lincoln; Stanley M Truhlsen, M.D., Omaha; Hiram R. Walker, M.D., Kearney

As Chairman of the Committee, I am pleased to submit this progress report.

While much effort was exerted in 1985 to obtain sufficient funding for matching the Kiewit Foundation grant, we were not successful in reaching that goal. The Kiewit Foundation however did indicate willingness to consider an alternate proposal.

In response, the Committee has begun the process of reassessing the goals and objectives of the previous grant proposal which called for a mobile health program. The concept has been retained by the Committee with the process by which health education programs might be disseminated through Nebraska being modified.

In its review process, the Committee has held several meetings with Dr. John Janovy, Acting Director of the University Museum and also with Dr. Hugh Genoways, the newly appointed Director of the Museum who will assume those duties on July 1, 1986. Both individuals are very optimistic and heartily encourage a health education approach that incorporates multiple audio visual technology that is available for teaching purposes today. With assistance from Dr. Janovy, the Committee is moving toward the development of a broad spectrum of health education programs that can be placed in all the elementary schools in the state. Review and research of education material will be the first phase in the new project and from this a cooperative effort between the Committee and the University Museum will be initiated for programming and distribution to schools throughout the state. A new grant proposal is being formulated for submission to the Kiewit Foundation which will incorporate this alternative approach. The grant request will not exceed available matching funds that have been received.

The Committee urges your support of the lottery effort of the Medical Association Auxiliary so we may obtain the maximum matching funds for this program. The Committee is confident this new approach will ensure quality programming on an ongoing basis.

This Committee again thanks all members and their families for your support of this project.

REPORT OF THE AD-HOC COMMITTEE, LOW LEVEL RADIATION WASTE DISPOSAL

Richard J. Petersen, M.D. Omaha - Chairman; Allen D. Dvorak, M.D., Omaha; Stanley Jaeger, M.S., Omaha; Martin R. Lohff, M.D., Omaha. Merton A. Quaife, M.D., Omaha; Jerald R. Schenken, M.D., Omaha; Paul Steffes, M.D., Omaha.

The Committee has met on several occasions through the 1985-86 year via written communications from the Chairman. The communications have included:

1. Informational material regarding the status of low level radioactive waste on a national perspective.

2. Significance of adequate low level radioactive waste disposal to the medical community at large.

3. Update on the current legislative issues in the Unicameral regarding low level radioactive waste management, particularly LB 1060 and LB 1211. Communications with members of the Unicameral on these two bills were made by members of the Committee. It is anticipated that LB 1211 will appear as an amendment to LB 491 and effectively give the State of Nebraska the enabling legislation required for membership in the Central Interstate Low Level Radioactive Waste Compact.

4. The Central Interstate Low Level Radioactive Waste Compact has been authorized to generate a transportation fee and this situation has been communicated to the members of the Nebraska Medical Association by the Committee.

The upcoming year will require continual monitoring of the low level radioactive waste legislation and also beginning considerations of the question of a low level radioactive waste disposal site within the boundaries of the State of Nebraska.

REPORT OF THE AD-HOC COMMITTEE ON MATERNAL AND CHILD HEALTH

Kenton L. Shaffer, M.D., Kearney - Chairman; **Section on Maternal Mortality Review:** George M. Adam, M.D., Hastings; James G Cummins, M.D., Omaha, Charles Field, M.D., Omaha; L. Palmer Johnson, M.D., Lincoln; William L. Rumbolz, M.D., Omaha; Larry Wilson, M.D., Gothenburg. **Section on Perinatal Mortality Review:** Stacie R Bleicher, M.D., Lincoln; Robert S. Grant, M.D., Lincoln, Robert M. Nelson, M.D., Omaha; Cindy Wiborg, Omaha.

The Ad-Hoc Committee on Maternal and Child Health dealt with several issues in 1985-1986.

The committee continues with the maternal mortality review which is published yearly in the Nebraska Medical Journal. In 1984 there were 26,449 births and 5 direct obstetrics deaths. The chairman wishes to thank Dr. William Rumbolz for his continued leadership in this area.

The committee continued to review perinatal deaths, both stillborns and neonatal deaths, looking for trends and areas of educational needs. Several presentations have been made in the state this last year by committee members with special emphasis on the evaluation of the stillborn infant. The committee and the NMA owes a thanks to Dr. Robert Grant who was retired as Director of the Maternal and Infant Division of the State Health Department for his assistance in this area. With his retirement the NMA, the Ad-Hoc Committee and the State Health Department will need to decide the future of this function of our committee.

The committee also dealt with the "Baby Doe" issue in the Fall of 1985. The Federal regulations required that all states have in place regulations to deal with "Medical neglect" in infants under 1 year of age by October, 1986. The committee met with the Director and representatives of the Nebraska Department of Social Services (DSS). A letter of agreement was signed by the Committee and DSS on 10/14/85. This agreement states that in a case of reported suspected medical neglect of an infant born with a handicapping condition, the Nebraska Department of Social Services will refer reports to an Ad-Hoc Resource Committee composed of practicing pediatricians, Neonatologists, a medical geneticist and a family practitioner. This Ad-Hoc Resource Committee will provide free consultation services 24 hours per day to DSS. The current implementation of the regulations within Nebraska should assure adequate medical review and avoid "nuisance snooping" by bureaucrats within our hospitals and medical practices. It should be apparent that the new regulations can imply punitive damages to a physician who is in violation of the State Child Abuse and Neglect Statutes. However, with the mechanisms in place a physician should have ample opportunity to avoid violation of the State Statutes. The committee applauds the Nebraska Department of Social Services and its director's willingness in working with the NMA in establishing reasonable procedures for implementation of these regulations.

REPORT OF THE AD-HOC COMMITTEE ON UNIFIED DUES

Louis Gogela, M.D., Lincoln - Chairman; Judith Butler, M.D., Superior; John D. Coe, M.D., Omaha; Carl Cornelius, M.D., Sidney; Joel Johnson, M.D., Kearney, Arnold Lempka, M.D., Omaha; Richard Meissner, M.D., Omaha; Dwaine J. Peetz, M.D., Neligh; Herbert Reese, M.D., Lincoln; Blaine Roffman, M.D., Omaha.

An Ad-Hoc Committee on Unified Dues was formed as recommended by the Reference Committee and was adopted by the House during the 1985 Fall Session. The Reference Committee suggested the Ad-Hoc Committee be formed to "educate the membership concerning the benefits of unified membership".

The Nebraska Medical Association functioned under a unified dues structure (local, state and AMA) for years until, at the instigation of the Omaha-Douglas County Medical Society, the unified dues concept was dissolved in 1972 through constitutional revision. Opposition was voiced to compulsion on a basic principle in membership enrollment.

With only approximately fifty percent of physicians in the United States now members of the AMA and with the increasing demand upon the functions and services the AMA provides, the AMA is increasingly seeking to expand membership. With the relentless and burgeoning intrusion of the federal bureaucracies into health care and with the worsening medical liability climate, the resources of the AMA are increasingly strained. The larger the membership, the more clout our speaker has before a Congressional hearing committee. The more adequate the monetary funds, the more successfully legislative and legal obstacles can be met and surmounted. The educational services of the AMA should be well-known to all physicians. The perceptive and understanding physician should have no philosophical problem with the unified membership concept.

The AMA has devised inducements to encourage membership expansion. The State Association with seventy-five percent AMA membership is entitled to an additional delegate to the AMA. The unified state is entitled to two additional delegates and the individual AMA membership dues are reduced. Currently, several states are unified, including Kansas, Oklahoma and Illinois.

In debating the feasibility of unified membership and the probable effect upon our Association, the Committee elected to canvass the NMA members who are not AMA members through a mailed questionnaire. The Board of Directors is to convey the response at the 1986 Spring Meeting. A formal vote on the unified membership by the House is not now scheduled for the Spring Meeting unless otherwise directed by resolution.

There is understandable concern about loss of membership at the state and local levels if unified membership is adopted. The thought was offered that the reduction in the AMA dues could be forthcoming to the State Association to compensate for any loss of revenue rather than assigning the benefit to the individual member.

To summarize: That unified membership is a very desirable concept and that there is urgent need for unity, is self-evident. Unfortunately, pragmatism must be reckoned with. The Board of Directors will give further thought to the matter and will give an opinion expressing what is best for organized medicine, both locally and nationally.

REPORT OF THE TASK FORCE ON ALTERNATE HEALTH PLANS I

Carl J. Cornelius, M.D., Sidney - Chairman; Warren G. Bosley, M.D., Grand Island: Dale W. Ebers, M.D., Lincoln: Vernon F. Garwood, M.D., Lincoln; Richard H. Meissner, M.D., Omaha; Donald Pavelka, M.D., Omaha; Michael J. Haller, M.D., Omaha: Roger D. Mason, M.D., Omaha.

No formal meetings of Task Force I have been held since the Fall Session. No new information which would tend to change the recommendations of the Task Force at the Fall Session has been forthcoming. The impact of the alternate systems currently operating in the state is as yet unclear. What is not unclear is that the number of alternate health plans and of so called cost containing schemes are creating a climate of increasing uncertainty in the practice of medicine.

Your Chairman has been in contact with one of the principals in the Georgia Medical Association, attempting to get more up-to-date information regarding the Georgia Medical Association's IPA. Your NMA Board of Directors recently authorized the expenditure of a small amount of money to cover the cost of duplicating and mailing such information but no returns on that investment have been realized as of this writing.

The recommendations of your Task Force remains that the NMA continue to monitor the development of Alternate Health Plans both intrastate and in other states and make further recommendations as appropriate.

REPORT OF THE AD-HOC COMMITTEE ON HEALTH POLICY STATEMENTS

C. Lee Retelsdorf, M.D., Omaha - Chairman; Charles L. Barton, M.D., Lincoln; Daniel S. Durrie, M.D., Omaha; Darroll J. Loschen, M.D., York; Dale E. Michels, M.D., Lincoln; Robert F. Shapiro, M.D., Lincoln; Charles S. Wilson, M.D., Lincoln; Frederick Youngblood, M.D., Omaha.

The Committee met on April 8, 1986, and approved the following policy statements for submission to the House of Delegates:

NEBRASKA MEDICAL ASSOCIATION HEALTH POLICY STATEMENTS

Credit Card Use

The Nebraska Medical Association has long supported the concept that the contract for the provision of medical care is made between the patient and their physician. The physician in this contractural arrangement is entitled to receive a fair and reasonable compensation for the service that he provides.

Because of inflation, the dramatic increase in physicians' overhead including malpractice insurance and increasing technology, many patients now find it difficult to pay for the medical service at the time it is rendered.

Therefore, the Nebraska Medical Association feels that the use of a bank/credit card is an acceptable alternative for physicians to use. It allows patients to pay for services at the time they are performed without a sudden cash outlay for those services. This mechanism allows the patients to maintain their responsibility in the physician/patient contract and allows the physicians to remain out of the credit/collection business.

Abuse in the Child and Elderly

The Nebraska Medical Association is aware of the significant medical psychosocial aspects of abuse. Over 3,000 episodes of substantiated abuse are reported each year and many more go unreported. Abuse can involve the elderly as well as children and may be as minor as verbal abuse to significant physical injury and death. On behalf of their patients, physicians recognize their responsibility for the detection, treatment and reporting of suspected cases of abuse. In addition, the Nebraska Medical Association strongly supports private and government financed studies in determining the causes of abuse and prevention of abuse. The Nebraska Medical Association also encourages its member physicians to seek out information to enable them to recognize situations where potential abuse exists as well as identificiation of abuse when it occurs and appropriate treatment and referral. The Nebraska Medical Association also supports increased public awareness of the problem of abuse, its emotional and physical effects and the problems that result in society from this abuse occurring.

Indigent Care

The Nebraska Medical Association believes the first duty of the physician is to the patient. This includes those indigent patients who have no means by which to pay for the health care services that they need.

However, no individual health care provider, including the physician, should be compelled to bear the full economic impact of providing care to indigent persons. Similarly, patients with the ability to pay for health care services should not be forced to subsidize care to indigent patients through cost shifting on the part of health care providers or through a "sick tax" on the part of government.

Rather, the financing of health care for the indigent is a societal issue and should be shouldered by all taxpayers in an equitable manner. In return, it is the duty of the health care provider to provide health care services to the indigent person in a cost-effective manner in order that scarce public resource can be used to their best advantage.

The Committee recommends the above policy statements be adopted by the House of Delegates.

REPORT OF THE COMMISSION ON LEGISLATION AND LEGAL AFFAIRS

Craig L. Urbauer, M.D., Lincoln - Chairman; Charles S. Wilson, M.D., Lincoln - Vice Chairman; Dwaine J. Peetz, M.D., Neligh - Advisor & Counselor; Patrick E. Brookhouser, M.D., Omaha; Judith A. Butler, M.D., Superior; James H. Dunlap, M.D., Norfolk; Vernon F. Garwood, M.D., Lincoln; Charles Gregorius, M.D., Lincoln; Barbara M. Heywood, M.D., Papillion; Ronald W. Klutman, M.D., Columbus; Dennis G. O'Leary, M.D., Omaha; Robert G. Osborne, M.D., Lincoln; Paul M. Paulman, M.D., Omaha; Richard A. Raymond, M.D., O'Neill; Herbert E. Reese, M.D., Lincoln; Blaine Y. Roffman, M.D., Omaha; Mylan R. VanNewkirk, M.D, Scottsbluff; Jerald R. Schenken, M.D., Omaha; Kathy Hedges, Omaha; Douglas Foulk, Omaha; Sam Cullan, Omaha.

The 1986 Session of the Nebraska Unicameral adjourned on April 15th with the majority of the session devoted to economic problems of the State of Nebraska as anticipated. There was considerable activity in the Unicameral of interest to the Nebraska Medical Association. Attached to this report is a list of the bills which were followed by the Legislative Commission.

The two main issues with which we were involved this session, were LB 131, which permits optometrists to treat diseases of the eye with topical ocular therapeutic agents, and LB 1005, which modified provisions of the Nebraska Hospital-Medical Liability statute. This bill altered the basic coverage that physicians who are covered under the act must carry, and clarified language in the bill such that claims against the fund will be paid according to the form of the basic coverage of the individual physician or institution involved. It allows the fund to hire outside legal counsel to defend itself. These were issues supported by the NMA.

On the issue of optometric use of therapeutic agents, we did not prevail. The 407 technical committee which had reviewed the bill for the State Health Department recommended approval although the Director of the State Health Department recommended against approval. Several Legislators were impressed enough by this recommendation to vote for the legislation when in previous years they had voted with the NMA. While this was obviously very disappointing, we continue to feel the 407 process remains viable and it remains a process which we think will ultimately work to our advantage.

Nevertheless, the NMA may have to reevaluate the legislative approach when it comes to these extremely important issues. We attempted to conduct this campaign on the basis of principle, and arguments relative to the importance of quality health care for Nebraskans. The optometrists conducted an intensive campaign both at home and in the rotunda. Senators and the Governor were inundated with mail and telegrams organized by the optometrists. This effort was impressive to both members of the Unicameral and the Governor.

This is not to say, however, that the NMA did not have a good showing in this regard. The Legislative Commission is well aware of the fact that many contact physicians, other interested physicians and physicians' spouses worked hard on this issue and many very constructive legislative contacts were made. We hope in the future, however, to organize in such a fashion as to make the most effective use of our member's time and effort. We do appreciate the efforts made by the membership on behalf of the Legislative Commission. We also appreciate very much the hard work and planning accomplished by the NMA staff and lobbyist.

A resume of legislation followed by the NMA during this session is listed below:

Bills Passed by the Legislature

LB 131 — Permit optometrists to treat diseases of the eye with topical ocular therapeutic agents. The bill passed with 27 votes on the final reading. The Governor's office was contacted immediately with a veto requested. Governor Kerrey had vetoed a similar bill in 1984. Following the contact, the Governor appointed his chief-of-staff to meet individually with both groups prior to making a decision. At the conclusion of the NMA portion of the meeting with the Governor's aide, there was optimism that a veto would be recommended. However, at 11:00 p.m. on the last day for the Governor to make his decision, the NMA was informed that he would sign the bill.
LB 201 — Fund a high risk pregnancy program
LB 227 — License respiratory therapists
LB 286 — Provide for certification of social workers.
LB 355 — License athletic trainers.
LB 438 — Limit persons who can administer dental anesthesia.
LB 491 — Establish a Low Level Radioactive Waste Disposal Act.
LB 579 — Provide for certification and registration of professional counselors.
LB 804 — Establish an Alzheimer's Task Force.
LB 895 — Require reporting for mandated health coverage provisions.
LB 925 — Provide funding for tumor registry program.
LB 1005 — Modify provisions of the Nebraska Hospital-Medical Liability statute. These include modification of basic coverage as of 1/87 from $100,000-$300,000 basic coverage to $200,000-$600,000; determination of reserves for the patient liability fund to be according to the form of basic coverage of the physician either claims made or occurence; provide for outside legal counsel to defend the fund.
LB 1047 — Permits Department of Health to set its laboratory fees.

Bills Either Indefinitely Postponed or not Acted Upon by the Legislature

LB 243 — Provided for certification of dieticians.
LB 291 — Provided for licensure of dispensing opticians.
LB 320 — Would have established an Adult Protective Services Act.
LB 361 — Modified autopsy requirements for SID.
LB 524 — Mandated a motorcyle helmet law.
LB 565 — Established a patient care information act.
LB 676 — Provided for direct reimbursement of nurse anesthesist.
LB 754 — Provided for establishing living wills.
LB 769 — Exempted physicians under the mandated seat belt law.
LB 773 — Provided for warning labels on smokeless tobacco.
LB 843 — Eliminated qualifications for Department Directors
LB 880 — Established general liability limitations.
LB 905 — Established infant screening for hearing impairment.
LB 916 — Established a medically indigent act.
LB 1046 — Provided for PKU testing to be in state laboratory.
LB 1060 — Established a Radiation Control Act.
LB 1135 — Established an indigent trust fund.
LB 1180 — Provided for a sales tax on services.

REPORT OF THE AD-HOC COMMITTEE ON HEALTH EDUCATION

Warren G. Bosley, M.D., Grand Island - Chairman; Stephen J. Lanspa, M.D., Omaha; Paul H. Phillips, M.D., Scottsbluff; Eileen C. Vautravers, M.D., Lincoln; Wesley G. Wilhelm, M.D., Omaha; Gregg F. Wright, M.D., Lincoln; Noel Timmons, Omaha.

The Ad-Hoc Committee on Health Education presents the following report to the House of Delegates.

The Committee invited representatives of the following organizations to discuss the problems presented to our society by pregnancies in mothers under 19 years of age. Representatives of organizations concerning this problem met with the Committee:

Leslie Bishop, Nebraska Association of School Boards
Chris Hanus, Department of Social Services
Jo Owens-Nauslar, Nebraska Department of Education
Bob Rogge, Nebraska State Education Association

The Committee noted that in 1984 there were 4,281 teenage pregnancies in Nebraska, and of that number about 1,744 were unintended and resulted in abortion. Chris Hanus stated the remaining pregnancies constituted 10% of all the births in the state for that year. She noted that 137 babies were born to girls 15 and under and that at the current rate, 4 out of 10 girls who were 14 will get pregnant in their teens. She also gave other statistics regarding education levels, marital situations and economic factors regarding teenagers who become pregnant. The Committee noted that if these teenagers do not finish high school they have less chance of becoming self-supporting. There are some job support programs which coordinate with ADC programs in the state; while utilizing ADC benefits recipients must continue to look for employment. The Department of Social Services also has developed programs for child care, medical support, pregnancy risk reduction, and counseling for young mothers who may be considering adoption and/or other considerations involved in caring for the child once born.

The Committee, with its guests, considered where responsibility may lie for counseling and instruction in sexuality and prevention of pregnancy for young people. It is difficult to assign the school sole responsibility to educate young people about sexuality, and there is a great need to develop meaningful parental involvement in this effort. The Committee recognizes that changes in our society reduce parental influence in the social development of children and adolescents, which may require our society to approach this problem in a less traditional manner. The Committee believes that parents, schools, churches, and medicine should all be involved in achieving some kind of solution. An educational program must be carefully coordinated by all groups concerned with young people in order to have a balanced, well-developed presentation. The Committee reviewed and discussed Family Life Education programs in various states as well as curriculum requirements that presently exist for Nebraska schools.

The Committee believes that physicians might very appropriately participate in leading the effort to improve the education and counseling our young people receive about their developing sexuality and responsibility. Perhaps a statement by physicians concerning the importance of sexuality education would benefit programs and might help gain the acceptance of parents and young people. The discussants believe that most physicians are comfortable discussing these issues with patients and in making presentations in schools, community groups and other appropriate forums. The Committee believes that physicians might benefit from some instruction in the techniques of teaching and that their local schools could assist in developing this resource. The discussants believe that the physician is probably well informed enough to be a good teacher, but that some instruction in teaching may be helpful.

The discussants are aware that many parents object to this kind of instruction in schools, even though they may not do an adequate job of teaching their children themselves. The Committee urges that these parents be urged to participate in committees and discussion groups that are concerned with sexuality and teenage pregnancy.

Pamphlet materials regarding sexuality and sex education were available, and the Committee was able to review of few of these. In addition, the Committee will solicit invitations to appear at meetings of education groups, PTA, and other appropriate organizations.

The Committee plans to continue its liaison with organizations represented above, and also to invite representatives of other organizations to subsequent meetings, in the hope of developing an effective effort of raising public consciousness about this impressive economic, social, and medial problem in Nebraska. The Committee solicits the approval of the House of Delegates to continue in this effort.

REPORT OF THE AD-HOC COMMITTEE ON PROFESSIONAL LIABILITY

James H. Dunlap, M.D., Norfolk - Chairman; Warren G. Bosley, M.D., Grand Island; Ernest Chupp, M.D., Omaha; Gernon A. Longo, M.D., Omaha; Dwaine J. Peetz, M.D., Neligh; Herbert E. Reese, M.D., Lincoln; Blaine Y. Roffman, M.D., Omaha; Robert F. Shapiro, M.D., Lincoln.

Your Committee has had several meetings through the year in addition to telephone conference calls. As always, the basic thrust of these meetings has dealt with professional liability concerns with the St. Paul Insurance Company and legislative activities dealing with professional liability.

As you are aware, Legislative Bill 1005 was passed late in the session after a considerable amount of work on your Committees part. This bill was introduced by the Insurance Commissioner's office through the Banking, Commerce and Insurance Committee of the State Legislature and was in a totally unacceptable form when first introduced. After innumerable conferences and telephone consultations and through unanimous consent of the Insurance Commissioners office, the Nebraska Medical Association, the Nebraska Hospital Association and Medical Liability Mutual, Medical Protective and St. Paul Companies, amendments were fashioned through out Committee which were accepted by the Legislature.

In essence, LB 1005 accomplishes three purposes:

1. Increases the base coverage required by Nebraska physicians under the law from 100,000/300,000 to 200,000/600,000 effective January 1, 1987.
2. Mandates the Insurance Commissioners office to follow the form of the underlying coverage (claims-made occurrence) in projections for excess liability obligations.
3. Permits and mandates the hiring of outside private legal counsel to aid in defense of the excess liability fund in litigation settlement.

It is our feeling that each of these changes was not only necessary but was desirable. All other basic tenants of the Nebraska Hospital-Medical Liability Act remain in effect.

A considerable delay in forging the consensus relative to this bill occurred because of a variety of misunderstandings early on in the legislative session. Your Committee Chairman feels that a comprehension of the underlying liability issues in Nebraska requires an extraordinary degree of continuity of Committee members and in addition, would suggest that efforts be made to add composition to the committee of physicians specifically insured by the three companies currently writing professional liability coverage in Nebraska.

Your committee has once again sponsored a Professional Liability Seminar in connection with this Annual NMA meeting. The current seminar was organized largely through the efforts of Warren Bosley, M.D. and Herbert Reese, M.D.

Continued ongoing efforts are being made to develop further educational materials primarily suitable for presentation to residents in training in our educational institutions and suitable for appropriate staff presentations.

The degree of ongoing responsibilities of this committee cannot be understated. There is no substitute for all of the background material which has been assimilated by the various committee members. It is my personal feeling that the degree of diligence exhibited by these committee members over the year merits full well the trust and confidence paid in them by the members of this state association.

Board of Councilors

The Annual Session meeting of the Board of Councilors was held April 25, 1986, at the Marriott Hotel, Omaha, Nebraska.

The following members were present: Drs. Stanley Truhlsen, Howard Dinsdale, C. T. Frerichs, Roger Massie, William Chleborad, Robert Herpolsheimer, Floyd Shiffermiller, Warren Bosley, David Little, R. E. Donaldson, Francis D. Donahue, Hiram Walker and Herbert Reese.

The meeting was called to order by the Chairman, Dr. Truhlsen.

Dr. Truhlsen called for approval of the minutes of the Fall Session, and these were approved as printed in the December issue of the Nebraska Medical Journal.

The Councilors reviewed the requests for Life Membership and Associate Membership, and these were accepted and recommended to the House of Delegates for consideration.

Dr. Massie called attention to the fact that Dr. Kenneth Pierson was listed under Northeast Nebraska Medical Society and that this should be the Antelope-Pierce County Medical Society.

In considering the Report of the Commission on Association Affairs, there was discussion concerning insurance coverage for credentialing committees of the hospitals. It was asked that legal counsel prepare a statement on this.

In discussing Resolution #4 concerning Mandatory Seat Belt Legislation, it was thought that there should be publicity and educational programs on this.

Mr. Neff reported to the Councilors on the membership recruitment program which was initiated this year.

Following discussion of cases received since the Fall Session, the meeting was adjourned.

House of Delegates

FIRST SESSION

The first session of the Annual Session meeting of the House of Delegates was held on April 25, 1986, at the Marriott Hotel, Omaha, Nebraska.

The meeting was called to order by the Speaker, Dr. McFadden. Roll call showed 84 delegates present, and the meeting was declared in session.

The following Fifty-Year Practitioners were recognized by the House of Delegates:
Charles M. Coe, M.D., Wakefield
Hull A. Cook, M.D., Sidney
Herbert D. Kuper, M.D., Columbus
John O. Milligan, M.D., Fremont
Maurice L. Pepper, M.D., Omaha

The following Fifty-Year Practitioners were unable to be present:
George T. Alliband, M.D., Omaha
McCleery Glazier, M.D., Laguna Hills, Calif.
Robert E. Karrer, M.D., York
Howard E. Mitchell, M.D., Lincoln
Kenneth E. Pletcher, M.D., Bellevue

Oral reports were presented by the following:
F. Wm. Karrer, M.D., Chairman, Ad-Hoc Committee on Tumor Registry
Robert Waldman, M.D., Dean, University of Nebraska College of Medicine
Gregg Wright, M.D., Director, State Department of Health

Greg Mueller, President of the NMA-MSC of the University of Nebraska Medical Center, presented a special service award to Dr. Robert Binhammer of the University of Nebraska Medical Center, from the Student Organization.

Dr. McFadden called for approval of the minutes of the Fall Session. Dr. Cottingham referred to Reference Committee #3, Resolution #4 from the Scotts Bluff County Medical Society, Subject: NMA/PRO Relationship, indicating that he would like to move that this be changed. Following discussion, the Chair ruled that this would be deferred to the second session of the House.

Dr. McFadden gave the Reference Committee members and the following assignments, which were approved by the House:

REFERENCE COMMITTEE #1
- Report of the Nebraska Foundation for Medical Care
- Resolution #3 — Metro Omaha Medical Society — Nebraska PRO
- Resolution #7 — Cheyenne — Kimball — Deuel Medical Society — Withdrawal of PRO Support by the NMA
- Resolution #8 — Northeast Nebraska Medical Society — PRO Relationship

REFERENCE COMMITTEE #2
- Annual Audit Report
- 1986 NMA Budget
- Report of the Commission on Association Affairs
- Report of the Ad-Hoc Committee on Unified Dues
- Report of the Board of Directors
- Resolution #9 — Metro Omaha Medical Society — Establish a Young Physician Commission
- Resolution #11 — Metro Omaha Medical Society — Annual Session Dates
- Resolution #12 — Metro Omaha Medical Society — Annual Session Dates

REFERENCE COMMITTEE #3
- Report of the Delegate to the AMA, Interim Session
- Report of the Committee on Health Planning
- Report of the Task Force on Alternate Health Plans I
- Report of the Commission on Legislation and Legal Affairs
- Report of the Ad-Hoc Committee on Professional Liability
- Resolution #5 — C. J. Cornelius, M.D. — Unfairness of Current Financing of Medicare
- Resolution #10 — Metro Omaha Medical Society — Medical Liability
- Resolution #13 — Metro Omaha Medical Society — Payment of Surgical Services Rendered Within 72 Hours Prior to Formal Surgical Procedures
- Resolution #14 — Metro Omaha Medical Society — Insurance Reimbursement for Sterile Surgical Trays

REFERENCE COMMITTEE #4
- Report of the University of Nebraska College of Medicine
- Report of the State Department of Health
- Report of the Nebraska Medical Foundation, Inc.
- Report of the Commission on Medical Education
- Report of the Ad-Hoc Committee on Health Education
- Resolution #4 — Metro Omaha Medical Society — Mandatory Seat Belt Legislation

REFERENCE COMMITTEE #5
- Life Membership and Associate Membership
- Report of the Ad-Hoc Committee on Health Galleries
- Report of the Ad-Hoc Committee on Maternal and Child Health
- Resolution #1 — Metro Omaha Medical Society — Iowa Blue Cross-Blue Shield — Medicare
- Resolution #6 — C. J. Cornelius, M.D. — ICD-9 Coding of Medicare Claims

REFERENCE COMMITTEE #6
- Report of the Commission on Public Affairs
- Report of the Ad-Hoc Committee on Geriatrics
- Report of the Ad-Hoc Committee on Low Level Radiation Waste Disposal

Report of the Ad-Hoc Committee on Health Policy Statements
Resolution #2 — Metro Omaha Medical Society — Third Party Payors

The following Nominating Committee was selected and approved by the House:

1st District — C. McWhorter, M.D., Omaha
2nd District — Robert Osborne, M.D., Lincoln
3rd District — George Voigtlander, M.D., Pawnee City
4th District — Dwaine Peetz, M.D., Neligh
5th District — Theo. Lemke, M.D., Columbus
6th District — Richard Pitsch, M.D., Seward
7th District — Charles Ashby, M.D., Geneva
8th District — Thomas Wallace, M.D., Gordon
9th District — Richard Hranac, M.D., Kearney
10th District — Donovan Foote, M.D., Hastings
11th District — Ronald Asher, M.D., North Platte
12th District — Loran Faaborg, M.D., Scottsbluff

There being no further business, the House was recessed until Sunday morning.

SECOND SESSION

The second session of the House of Delegates was held on April 27, 1986.

The House was called to order by Dr. McFadden, Speaker of the House. Roll call showed 73 delegates present, and the House was declared in session.

Dr. McFadden told the House that it was the decision of the Chair that the report of Reference Committee #3, regarding Resolution #4, at the 1985 Fall Session as printed in the December, 1985 Nebraska Medical Journal, reflected the words of the Reference Committee which had been adopted by the House, and therefore this could not be ammended at this time. Following discussion, the minutes of the 1985 Fall Session were approved as printed.

Approval of the minutes of the first session of the House was called for, and these were approved.

Approval of the minutes of the Board of Councilors was called for, and these were approved.

The following oral reports were given:

Mrs. Leslie Grace, Immediate Past President, NMA Auxiliary — Presentation of the AMA-ERF checks to the Creighton University School of Medicine and to the University of Nebraska College of Medicine.

Mrs. Leslie Grace, Immediate Past President, NMA Auxiliary — Report of NMA Auxiliary.

Dr. Howard Dinsdale, President, Nebraska Medical Foundation, Inc. — Presentation of scholarship check to Mark L. Gates, medical student at Creighton University School of Medicine and to Tim Hollingsed, medical student at the University of Nebraska Medical Center.

Dr. Richard O'Brien, Dean, Creighton University School of Medicine.

The Chair called for the reports of the Reference Committees and the following were presented:

Reference Committee #1

Reference Committee #1 considered the report of the Nebraska Foundation for Medical Care and Resolutions #3, #7, and #8. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE NEBRASKA FOUNDATION FOR MEDICAL CARE

The content of the report was reviewed in detail and related commentary raised the following concerns:

1. There was considerable contention regarding the first sentence in the third paragraph, "The support of the physicians throughout the state is an essential ingredient to carrying out the functions and responsibility of this program." There was extensive discussion as to whether or not the program had the support of the physicians of the state.

2. There were multiple concerns expressed regarding resources of support for the NFMC. These were relieved by statements of fact that no NMA monies supported the activities of the Foundation's Professional Review Organization.

3. Distinctive concern was stated regarding the expenditure of NFMC monies in support of executive services from NMA administrators. It was stipulated that such monies were paid to the NMA and not directly to executive personnel. Therefore, monetary related conflicts of interest was not a problem. In addition, it was stated there were no other administrative personnel with dual job responsibilities between the NMA and the NFMC.

It is recommended the report of the Nebraska Foundation for Medical Care be accepted for information.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) RESOLUTION #3 — METRO OMAHA MEDICAL SOCIETY — NEBRASKA PRO
RESOLUTION #7 — CHEYENNE-KIMBALL-DEUEL MEDICAL SOCIETY — WITHDRAWAL OF PRO SUPPORT BY THE NMA
RESOLUTION #8 — NORTHEAST NEBRASKA MEDICAL SOCIETY — PRO RELATIONSHIP

These resolutions read as follows:

Resolution #3

WHEREAS, the guidelines under which peer review organizations (PRO) act are being more and more unilaterally established by HCFA and appear to be focused on cost containment rather than quality, and

WHEREAS, many physicians feel that there is little or no functional difference between the Nebraska Medical Association and the Nebraska Foundation for Medical Care (PRO) and they tend to focus their complaints toward organizations that the PRO interferes with their patients' care;

THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association evaluate the function of the Nebraska PRO, its ability to serve the physicians and patients of Nebraska and the desirability of continued Nebraska Medical Association's association with the PRO and report back to the House of Delegates at the Fall, 1986 Session.

Resolution #7

WHEREAS, the activities of the PRO of Nebraska are creating increasing dissatisfaction amongst Nebraska physicians, and

WHEREAS, the functions of the PRO and those of the headquarters office and staff have become so intertwined that this dissatisfaction is being directed towards the NMA, and

WHEREAS, the emphasis of the PRO has been cost-containment at the expense of quality; therefore, be it

RESOLVED, that the NMA withdraw its support of the PRO and terminate all activities in conjunction with PRO in Nebraska.

Resolution #8

WHEREAS, the Nebraska Foundation for Medical Care is currently performing retrospective review of hospital utilization and serving as the PRO for this state, and

WHEREAS, this function is essentially that of a paid arm of the third party payer, namely the Social Security Agency, and

WHEREAS, this service as a functionary of the third party payer is at times, by nature, in conflict with the best interest of our patients, and

WHEREAS, the Nebraska Medical Association has and should continue to stand as an advocate for the health care needs of the citizens of the State of Nebraska; therefore, be it

RESOLVED, that the Nebraska Medical Association and its officers and employees totally disassociate themselves from the Nebraska Foundation for Medical Care.

These three resolutions were condered concurrently by your Reference Committee and concerned two major issues:

1. The establishment of a system for study of the function of the Nebraska PRO, its ability to serve the physicians and patients of Nebraska and the desirability of a continued distinct relationship between the NMA and the NFMC-PRO.

2. The total separation of the NMA administration and elected officials from the NFMC.

Lively discussion was heard both pro and con to the resolutions. Based on the content of the commentary, your Reference Committee makes the following recommendations:

1. The Board of Directors of the Nebraska Medical Association is to commission a study to:

a. Determine the extent of the NMA membership discontent regarding the relationship between the NMA and the NFMC in its role as the PRO administrator for the State of Nebraska.

b. Assess whether or not the relationship between the NMA and the NFMC will progressively adversely affect the membership's attitude toward the NMA.

c. Determine membership opinion as to whether or not a complete separation of the NMA from the NFMC will adversely affect Nebraska physicians' ability to influence Nebraska PRO policy and regulations and influence the quality of care for Medicare recipients.

The Board of Directors is further instructed that the study should be performed by a reputable organization in such a fashion that the validity of the study will be acceptable to a majority of the membership.

Based on the testimony presented, the NFMC leadership must be responsive to the NMA membership's request for information regarding both the operations and intended contractual relationships of the NFMC Professional Review Organization.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was seconded and there was considerable discussion concerning this item. A motion was made by Dr. Adams to amend the motion to exclude officers of the NMA — President, President-Elect, Secretary-Treasurer, Speaker, Vice Speaker and the Board of Directors — from membership on the Nebraska Foundation for Medical Care Board and to eliminate cross over in NMA and the NFMC office staff. This was seconded and considerable discussion followed. On a hand vote, this motion lost. This section of the Reference Report was then adopted.

Following lengthy deliberation by your Reference Committee, it is further moved that the decision concerning complete separation of the NMA from the NFMC be deferred until the above study is completed and reported to the Board of Directors. The Board of Directors, based on the study, shall make a recommendation to the House of Delegates at its Fall Meeting as to the desirability or lack thereof for a continued close relationship between the NMA and the NFMC Professional Review Organization.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF YOUR REFERENCE COMMITTEE #1 REPORT AS A WHOLE. This was adopted by the House.

Respectfully submitted,
Frederick F. Paustian, M.D., Omaha,
Chairman
A. H. Bergman, M.D., Fremont
Craig L. Urbauer, M.D., Lincoln

Reference Committee #2

Reference Committee #2 considered five reports and three resolutions. The Reference Committee submits the following report and recommendations.

(1) ANNUAL AUDIT REPORT

Your Reference Committee recommends adoption of this report.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) 1986 NMA BUDGET

Your Committee recommends adoption of this budget.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE COMMISSION ON ASSOCIATION AFFAIRS

Your Committee recommends adoption of this report.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE BOARD OF DIRECTORS

Your Committee recommends adoption of this report.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) REPORT OF THE AD-HOC COMMITTEE ON UNIFIED DUES

It was the consensus of all individuals attending this Committee that there were many advantages of belonging to the AMA. All of us need to improve our educational efforts on a person-to-person basis, especially to physicians who are not members of the NMA and AMA. Physicians detest anything "forced down their throats." Unfortunately, everyone felt that it was not a prudent idea in 1986 to encourage unified dues, primarily because it would be too great a risk in losing members. It has been estimated that we would lose approximately 20-25% of our membership. The efforts of our student members at the medical schools should be commended in gaining further involvement by medical students and house officers.

Recommendation:

We do not recommend unified dues at this point in time.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) RESOLUTION #9 — METRO OMAHA MEDICAL SOCIETY — ESTABLISH A FIVE-YEAR GRADUATED DUES STRUCTURE AND ESTABLISH A YOUNG PHYSICIAN COMMISSION

Resolution #9 read as follows;

WHEREAS, a survey, by the Young Physicians Task Force of the Metropolitan Omaha Medical Society, with 302 physicians graduating after 1971, indicated that only 48 percent belonged to Metropolitan Omaha and Nebraska Medical Association, citing cost as the major deterent factor for not joining the medical society at local, state, or national levels;

BE IT RESOLVED, that the Nebraska Medical Association encourage a higher level of membership and participation by establishing a Young Physician Commission at the state level, by imposing a five-year graduated dues structure and by taking these same proposals to the American Medical Association, offering Nebraska as a test state for the AMA to evaluate this concept.

The resolution was amended as follows:

"BE IT RESOLVED, that the Nebraska Medical Association support a five-year graduated dues structure in order to encourage a higher level of initial participation and develop greater organizational participation before assuming full financial responsibility, and

BE IF FURTHER RESOLVED, that the Board of Directors consider establishment of a Young Physician Commission at the state level."

Recommendation:

It was the unanimous feeling from all individuals present that this resolution should be fully supported.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(7) RESOLUTION #11 — METRO OMAHA MEDICAL SOCIETY — ANNUAL SESSION DATES
RESOLUTION #12 — METRO OMAHA MEDICAL SOCIETY — ANNUAL SESSION DATES

These resolutions read as follows:

Resolution #11

WHEREAS, with the current Nebraska Medical Association annual meeting schedule, Fun Night falls on Saturday, and

WHEREAS, the Creighton BASH is always scheduled for the last Saturday in April, which proves to be a tremendous conflict with Creighton University graduates; therefore

BE IT RESOLVED, that this House of Delegates seriously consider returning to the old schedule, Sunday p.m. to Wednesday noon; and be it further

RESOLVED, that this change take place beginning at the 1987 Annual Meeting.

Resolution #12

WHEREAS, the new schedule for the Nebraska Medical Association annual meeting, opening Friday and officially adjourning Sunday evening, and

WHEREAS, the Sportsman's Day follows the adjournment making it difficult for outstate physicians to take part in this activity, and

WHEREAS, Sportsman's Day focuses on enhancing the camaraderie of physicians from all parts of the state; therefore

BE IT RESOLVED, that this House of Delegates strongly consider reverting to the old convention schedule, opening Sunday 1:00 p.m. with adjournment Wednesday after the noon luncheon; and

BE IT FURTHER RESOLVED, that this change to take place beginning at the 1987 Annual Meeting.

Both of these resolutions were considered together since they cover the same recommendation, that is to change the beginning of future NMA meetings back to the old schedule of Sunday through Wednesday. It was pointed out that the current schedule originated in 1982, stimulated by the Scientific Sessions Committee encouraging greater participation by specialty societies and membership for better attendance purposes and this seems to have succeeded. On the other hand, with all Association business completed on Sunday, fewer physicians are staying around on Monday to participate in Sportsman's Day. The reason for Sportsman's Day on Monday is that private clubs are closed on Mondays and this is the only day in Omaha or Lincoln that a private club could be reserved for NMA member usage. Attendance at Fun Night has also decreased. The new recommended schedule would put Fun Night back on Tuesday evening instead of Saturday evening. Some individuals are satisfied with the current schedule, i.e., Friday through Sunday, for the Association affairs, feeling that is the primary purpose of the meeting. Therefore, a decision was not made or appropriate from the small representation in this committee.

Recommendation:

The House of Delegates should vote on whether to keep the NMA Annual Session on Friday through Sunday with Sportsman's Day on Monday, or change to a different schedule of Sunday through Wednesday.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was seconded and discussion followed. It was pointed out that the dates for these meetings must be set a few years in advance and that it probably would not be possible to change the dates for the 1987 Session.

Dr. Zweiback moved to consider changing the meeting format to make Sportsman's Day and Fun Night more effective as well as continuing the other current activities of the meeting. This study should be made under the direction of the Board of Directors and reported to the House of Delegates. Following discussion, this amendment was adopted.

This section of the Reference Committee report was adopted as amended.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITTEE #2

AS A WHOLE AS AMENDED. This was adopted by the House.

Respectfully submitted,
Alan D. Forker, M.D., Lincoln, Chairman
Fred Gawecki, M.D., Papillion
Stanley Nabity, M.D., Grand Island

Reference Committee #3

Reference Committee #3 considered five reports and four resolutions. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE DELEGATE TO THE AMA, INTERIM SESSION

Your Reference Committee considered this report by Doctor Gogela to be informational in nature and recommends its acceptance and commends Doctor Gogela for its presentation.

MR. SPEAKER, YOUR REFERENCE COMMITTEE MOVES ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE COMMITTEE ON HEALTH PLANNING

Your Committee takes note of the fact that a recommendation is made in this report suggesting the purchase of a video tape suitable for statewide consumption dealing with the "bioethics of rationing of health care." It was felt that this video tape would be appropriate to present to County Medical Societies, service clubs, extension clubs, church groups, etc. in an attempt to stimulate discussion and public education regarding the issues of rationing of health care.

Your Committee recommends that this action be taken and that the appropriate distribution of knowledge concerning this tape be disseminated to the various component medical societies for their use in stimulating increasing public awareness of the implication of the rationing of health care.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE TASK FORCE ON ALTERNATE HEALTH PLANS I

Your Committee received this report as an informational item and recommends continued monitoring of various alternate health care plans for possible implementation in Nebraska.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE COMMISSION ON LEGISLATION AND LEGAL AFFAIRS

Your Reference Committee commends this Commission for its work during the past year. We further take heed of the testimony given at this Reference Committee meeting by Doctor Urbauer and other members of this Commission of the imperative need of increased action on the part of the medical society in regard to lobbying efforts and of physical and financial needs for more active participations in political activities. It is a physical impossibility to significantly impact legislation without a great deal more activity on the part of the NMA members in individual campaign efforts and in lobbying efforts dealing with the wide variety of bills which impinge on medicine. Your Reference Committee has received this report as an informational item.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) REPORT OF THE AD-HOC COMMITTEE ON PROFESSIONAL LIABILITY

Your Reference Committee received this report as an informational item and commends the Ad-Hoc Committee's members on their continuing efforts dealing with professional liability.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) RESOLUTION #5 — C. J. CORNELIUS, M.D. — UNFAIRNESS OF CURRENT FINANCING OF MEDICARE

This resolution read as follows:

WHEREAS, the cost of the Medicare program has far exceeded even the predictions of organized medicine, and

WHEREAS, much of the cost is due to the success of the health care providers in saving and extending the lives of countless numbers of older Americans, and

WHEREAS, Medicare was enacted as a "tax-supported" program making it an obligation of all tax-paying citizens, and

WHEREAS, Medicare was enacted as a "tax-supported" program making it an obligation of all tax-paying citizens, and

WHEREAS, recent actions of Congress have shifted increasing amounts of financing of this program to the providers of care, particularly physicians and hospitals, and

WHEREAS, the ability of providers to absorb increasing percentages of the cost of this program has been exhausted, particularly when added to the increased demands of the Medicaid programs, the increasing numbers of medically indigent, and the increasing costs of professional liability; therefore, be it

RESOLVED, that the NMA study ways to communicate the unfairness of current Congressional activities to balance the Medicare budget at the expense of health care providers rather than institute the restructuring of the Medicare program necessary to put the program on a sound financial footing.

Your Committee recommends adoption of this resolution and further recommends that the intent of this resolution be carried to the forthcoming American Medical Association House of Delegates meeting as a resolution by our delegate members.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(7) RESOLUTION #10 — METRO OMAHA MEDICAL SOCIETY — MEDICAL LIABILITY

This resolution read as follows:

WHEREAS, physicians overhead is increasing rapidly with the greatest dollar and percentage increase going for malpractice premiums, and

WHEREAS, Medicare and other third party carriers are freezing or decreasing fees for physicians services, and

WHEREAS, physicians are required by both profit and non-profit institutions and organizations to carry prescribed minimum amounts of medical liability coverage to function within the organization or institution, and

WHEREAS, participation in these organizations is required by the physician to care for his patient, and

WHEREAS, there is no provision for an increased reimbursement to the physician allowing for these increases in cost, and

WHEREAS, these circumstances have been shown to result in a decrease in health care delivery, and

WHEREAS, individual physicians are powerless to have any impact on this problem, and

WHEREAS, start-up costs will discourage the individual physician from establishing an independent practice which could be particularly detrimental in rural communities;

THEREFORE, BE IT RESOLVED, Nebraska Medical Association take aggressive action to resolve this issue on behalf of their members.

Your Reference Committee found this resolution to be somewhat confusing in its language and thrust. After consultation with members of the Omaha delegation, the sense of the resolution was thought to be defined in the multiple financial problems in the startup of a medical practice with particular reference to professional liability coverage. Your Reference Committee believes the following substitute resolution better reflects this aim.

"BE IT RESOLVED, that the NMA continue to take aggressive action to resolve the professional liability financial issues impeding the establishment and distribution of physicians in all levels and location of practice."

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(8) RESOLUTION #13 — METRO OMAHA MEDICAL SOCIETY — PAYMENT OF SURGICAL SERVICES RENDERED WITHIN 72 HOURS PRIOR TO FORMAL SURGICAL PROCEDURES

This resolution read as follows:

WHEREAS, Medicare, Medicaid, and the Blue Shield organizations decline to pay surgeons for preoperative care if it is rendered within 72 hours of surgery, and

WHEREAS, a variety of services must often be performed by surgical practitioners for cases referred to them as well as for cases of their own, such as diagnostic work ups, debridement, dressings, installation of vascular catheters, splints, bandages and casts, and

WHEREAS, it is unfair to patients and practitioners alike to label such services as "non-covered services;"

THEREFORE, BE IT RESOLVED, that the House of Delegates of the Nebraska Medical Association request that the Medicare, Medicaid and Blue Shield organizations and any other third party carrier reexamine their positions and consider making provision for a fair and equitable reimbursement to surgical practitioners for surgical services rendered within 72 hours of the preopertive period.

Your Reference Committee heard no dispute regarding this resolution and recommends its adoption.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(9) RESOLUTION #14 — METRO OMAHA MEDICAL SOCIETY — INSURANCE REIMBURSEMENT FOR STERILE SURGICAL TRAYS IN OFFICES

This resolution read as follows:

WHEREAS, Medicare, Medicaid and Blue Shield and other third party carriers will not pay for office sterile surgical trays, and

WHEREAS, considerable financial outlay is obviously necessary to furnish such needed supplies as sutures, syringes, needles, local anesthetics, hats, masks, gloves, aprons, sterile towels, instruments, bandages, assorted supplies used in suction and fulguration, etc., and

WHEREAS, a concerted effort is currently being made to save cost by all carriers, both private and federal, by shifting of as much case work as is safely possible out of hospitals to hospital outpatient departments, to private outpatient surgical centers, and to private offices, and

WHEREAS, it is unfair to force private practitioners to assume all such office expenses, especially in federally mandated insurance programs, and

WHEREAS, such societal shifts in current medical practice patterns as described above are continuing to expand in importance in America;

THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association House of Delegates request the Medicare, Medicaid and Blue Shield organizations and other third party carriers re-examine their positions and make provisions for reimbursement for sterile surgical trays furnished in offices.

Your Reference Committee heard multiple testimony to the fact that the Current Procedural Terminology #4 contains appropriate identifying billing numbers which when used would satisfy the intent of this resolution. We recommend defeat of the resolution.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITTEE #3 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
James Dunlap, M.D., Norfolk, Chairman
Richard Svehla, M.D., Omaha
George Voigtlander, M.D., Pawnee City

Reference Committee #4

Reference Committee # 4 considered five reports and one resolution. Your Reference Committee submits the following report and recommendations.

(1) UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE

Because of Doctor Waldman's excellent presentation before the House of Delegates, there was no discussion. The Committee recommends the report be accepted as presented.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS

SECTION OF OUR REPORT. This was adopted by the House.

(2) STATE DEPARTMENT OF HEALTH

Doctor Wright was present. Most of the discussion centered around the regulations, Doctor Wright explained the LB 407 process and reiterated his feelings that this particular process will be helpful to evaluate future requests for licensure change. The political process cannot be removed but a better format for evaluation will gradually evolve.

Discussion also explored the change in relationship between the Bureau of Examining Boards and the Attorney General's office.

Recommendations:

1. The Reference Committee accepted the report as written.

2. The Reference Committee feels that the House of Delegates should be made aware of the new process whereby an Assistant Attorney General will be assigned to work only with the Bureau of Examining Boards. All should be aware that reports about physicians or other individuals who are licensed through the Department of Health and who exhibit aberrant practices can and will be investigated with much greater ease and completeness by the newly appointed Assistant Attorney General.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) NEBRASKA MEDICAL FOUNDATION, INC. REPORT

Discussion related to the current usage of the loan and scholarship fund. Doctor Dinsdale amended his report by saying that since 1964, over $1.5 million has been loaned to students. Less than 1% of the loans have defaulted.

The Tumor Registry was discussed and Doctor Karrer was complimented on his excellent work and excellent presentation before the House of Delegates.

Recommendations:

1. Your Committee recommends this report be accepted as written.

2. Your Committee recommends that the physician members of the NMA be urged to contribute to the loan and scholarship funds at the time of the annual dues statement and additionally at other times during the year.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE COMMISSION ON MEDICAL EDUCATION

The discussion centered around the development of a new Policy and Procedure Manual for Accreditation. The new procedure will become effective after June of 1986. It was reported that there are currently 15 groups who are authorized to give CME credit. These groups are either hospitals or specialty society associations. The Nebraska Medical Association's Commission on Medical Education developed the manual and is the credentialing body for CME credits within the state.

Recommendations:

1. The Reference Committee commends Doctor Paustian on the development of the credentialing manual and accepted the report as written.

2. The Committee recommends the manual be approved.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) REPORT OF THE AD-HOC COMMITTEE ON HEALTH EDUCATION.

Discussion involved the topic of teenage pregnancies. Doctor Wright of the Department of Health provided background information about this problem. Doctor Bosley's report indicated that the Ad-Hoc Committee on Health Education will continue its liaison with organizations like School Boards, Social Services, the Department of Education, and Nebraska Education Association.

The Reference Committee urges the Committee on Health Education to continue its liaison activities and further urges all members of the Nebraska Medical Association to counsel individual families and work with church groups and educators in hopes of reducing the number of unintended pregnancies especially below the age of 17.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) RESOLUTION #4 — METRO OMAHA MEDICAL SOCIETY — MANDATORY SEAT BELT LEGISLATION

The resolution read as follows:

> WHEREAS, experience with utilization of seat belts in the front seats of passenger vehicles has conclusively shown that they save lives and reduce injury, and
>
> WHEREAS, studies in many states that have instituted mandatory seat belt laws in recent years confirm that additional lives can be saved and injury prevented, and
>
> WHEREAS, failure to utilize seat belts which result in injury and death, inflicts great costs upon society by increasing insurance premiums, adding unnecessary medical costs, and increasing the obligation of taxpayers for the cost of indigent care, and
>
> WHEREAS, legitimate medical reasons for failure to wear seat belts are extremely rare, and
>
> WHEREAS, lap seat belts will be required for safety even if air bags are present in the automobile;
>
> THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association continue to support the State of Nebraska's mandatory seat belt legislation and oppose its repeal.

Discussion from neurosurgeons from Lancaster County commented on the reduced number of head injuries since the seat belt law went into effect in September, 1985. Lancaster County further requested that consideration be given to motorcycle accidents. All who were at the Reference Committee felt that the seat belt legislation was to be highly supported as the number of automobile accident deaths appear significantly lower in the past six months.

Recommendations:

1. The Reference Committee strongly supports the

mandatory seat belt legislation resolution as written. We urge our members to voice this support prior to the fall referendum vote.

2. The Committee felt that an appropriate resolution regarding motorcycle helmets should be delayed but encouraged for the interim session in the fall of 1986.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

COMMENTS: Several individuals at the Reference Committee meeting were members of the Medical Student Section of the Nebraska Medical Association from the University of Nebraska College of Medicine and Creighton University School of Medicine. The students expressed their interest in learning about the process of organized medicine and felt that the present medical students wish to become more involved in this process. The Reference Committee wishes to recognize the efforts of these students and encourages them to continue their programs.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITTEE #4 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
Richard Meissner, M.D., Omaha, Chairman
Myron Samuelson, M.D., Wymore
Roger Massie, M.D., Plainview

Reference Committee #5

Reference Committee #5 considered three reports and two resolutions. The Reference Committee submits the following report and recommendations.

(1) LIFE MEMBERSHIP AND ASSOCIATE MEMBERSHIP

These requests were as follows:

LIFE MEMBERSHIPS

BOX BUTTE COUNTY MEDICAL SOCIETY
Raymond Olson, M.D., Alliance
GAGE COUNTY MEDICAL SOCIETY
Elmer Penner, M.D., Beatrice
HOLT & NORTHWEST MEDICAL SOCIETY
John Farner, M.D., Valentine
Rex Wilson, M.D., O'Neill
LANCASTER COUNTY MEDICAL SOCIETY
Kenneth J. Fijan, M.D., Lincoln
Robert Grant, M.D., Lincoln
Frank A. Stewart, M.D., Lincoln
METRO OMAHA MEDICAL SOCIETY
Albert Black, M.D., Omaha
Frank Eagle, M.D., Omaha
Henry J. Lehnhoff, M.D., Omaha
Robert S. Long, M.D., Omaha
Delbert Neis, M.D., Omaha
Leland Olson, M.D., Omaha
Maurice L. Pepper, M.D., Omaha
Charles M. Root, M.D., Omaha
Richard Smith, M.D., Omaha
ANTELOPE-PIERCE COUNTY MEDICAL SOCIETY
Kenneth Pierson, M.D., Neligh
PLATTE-LOUP VALLEY MEDICAL SOCIETY
Warren Miller, M.D., Columbus
SAUNDERS COUNTY MEDICAL SOCIETY
E. J. Hinrichs, M.D., Wahoo
SCOTTS BLUFF COUNTY MEDICAL SOCIETY
Carl Frank, M.D., Scottsbluff

ASSOCIATE MEMBERSHIP

METRO OMAHA MEDICAL SOCIETY
John B. Davis, M.D., Omaha

The Committee was unanimous in accepting this report.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) AD-HOC COMMITTEE ON HEALTH GALLERIES

There was very little discussion of this item. Mr. Neff reported that this was merely a progress report on the status of the Health Galleries. The Committee recommends that this report be accepted as submitted.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) AD-HOC COMMITTEE ON MATERNAL AND CHILD HEALTH

Doctor Kenton L. Shaffer was present and explained the report in detail.

The Committee would like to emphasize that portion of the report suggesting that the Committee and NMA owes a great deal of thanks to Doctor Robert Grant who has retired as Director of Maternal and Child Health Division of the State Health Department for his long service in this area, and that a letter be sent to Doctor Grant so stating. The Reference Committee and those present feel strongly that a physician should be the successor to Doctor Grant.

Doctor Shaffer indicated there is a large backlog of perinatal mortality reviews to be completed. It is the feeling of the Committee that a mechanism needs to be established so revews can be completed on a more timely basis. Prompt reviews will be much more effective from an educational standpoint and for the purpose of identifying any particular problem areas.

With the above emphases, the Committee recommends the adoption of the report as submitted.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) RESOLUTION #1 — METRO OMAHA MEDICAL SOCIETY — IOWA BLUE CROSS-BLUE SHIELD — MEDICARE
RESOLUTION # 6 — C. J. CORNELIUS, M.D. — ICD-9 CODING OF MEDICARE CLAIMS

These resolutions read as follows:

Resolution # 1

> WHEREAS, Medicare reimbursement for Nebraska physician services is now processed by Iowa Blue Cross-Blue Shield, which follows the guidelines of the Iowa Foundation for Medical Care, and
>
> WHEREAS major problems in processing the claims and providing adequate compensation are causing significant problems for Nebraska physicians and for Medicare patients;
>
> THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association direct its leadership and Executive Director to:
>
> 1. Establish a **hotline** for patients and physicians to report problems with Medicare to the NMA.

2. Develop an **active lobbying effort** with Iowa Blue Cross-Blue Shield;
3. Develop **further legal and political options** to improve this situation.

Resolution #6

WHEREAS, Blue Cross-Blue Shield of Iowa is the fiscal intermediary for Part B Medicare for Nebraska principally because it contracted to provide services to HHS at a significantly lower cost-per-claim than in-state insurance companies, and

WHEREAS, BC-BS of Iowa has been promoting the use of the ICD-9 diagnostic code numbers in the submission of Medicare claim forms, and

WHEREAS, ICD-9 coding is a complex and comprehensive activity not easily learned and requiring considerable experience for accurate operation, and

WHEREAS, this degree of sophistication is unnecessary in most instances in the submission of claims from physicians' offices, and

WHEREAS, this represents another attempt on the part of the Government, via their fiscal intermediary, to reduce the cost of the administration of a program at the expense of physicians by promoting a "non-revenue producing" activity at a time when physicians are already being forced to subsidize the Medicare program via the fee freeze and other administrative mechanisms;

RESOLVED, that the NMA enter into dialogue with BC-BS of Iowa regarding this activity and report to the membership the results of such dialogue in the NMA Newsletter (pink sheet) as soon as possible.

Because of the very similar nature of Resolution #1 and #6, your Committee considered these resolutions together. Much discussion was forthcoming and there does seem to be a significant communication problem with Iowa Blue Cross-Blue Shield. The Committee was reluctant to recommend a hotline for patients and physicians to report problems. It is the feeling of the Committee that the existence of a hotline implies that a mere phone call will solve the problem and this is something the NMA may not be in a position to deliver. An ineffective hotline might result in disillusioned and disappointed physicians and patients.

The Committee feels that an appropriate committee or commission as determined by the Board of Directors establish some form of face to face meaningful dialogue between NMA and Iowa Blue Cross-Blue Shield, and in fact all third-party payors so that mutual problems can be resolved. It is hoped that this can be given a very high priority. The Committee chose to delete Item #3 of the RESOLVED in Resolution #1. The Committee felt that initially the approach should be that of mutual problem solving rather than an adversarial approach. Any information that can be gleaned from this approach should be communicated to the membership as soon as practical inasmuch as matters that effect reimbursement are of great concern to physicians particularly in the present day atmosphere.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITTEE #5 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
Allan Landers, M.D., Scottsbluff, Chairman
John Fitzgibbons, M.D., Omaha
Kenneth C. Bagby, M.D., Blair

Reference Committee #6

Reference Committee #6 considered four reports and one resolution. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE COMMISSION ON PUBLIC AFFAIRS

The Commission's report is entitled "Promoting the physicians as a patient advocate." The Commission presented several ongoing programs which acquaint the people of the state with the activities and the accomplishments of their physicians. This report is accepted for informational purposes and the Commission is to be commended for their activities.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE AD-HOC COMMITTEE ON GERIATRICS

Doctor Hranac outlined the activities of the Ad-Hoc Committee on Geriatrics especially regarding the questionnaire which was formulated and sent out to the state's physicians. The Committee was informed that the response approached 35%. The tabulation of the results and the effects of prospective payment systems on physicians' practices will be brought before the Delegates at the Fall Session. The Ad-Hoc Committee on Geriatrics is to be commended on their activities.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE AD-HOC COMMITTEE ON LOW LEVEL RADIATION WASTE DISPOSAL

This report is accepted for informational purposes. We recommend that the Committee continue to inform the members of the NMA on developments in the low level radiation waste disposal problems at a state level.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE AD-HOC COMMITTEE ON HEALTH POLICY STATEMENTS

This Committee is chaired by Dr. C. Lee Retelsdorf, who reported to the Reference Committee. The health policy statements involved credit card use for medical services as well as abuse of children and the elderly. Doctor Retelsdorf pointed out that care of the indigent in Nebraska will become a more severe problem especially as the question of financing is shifted from providers to patients to state agencies.

Recommendations:

1. Your Reference Committee would recommend that the NMA support the use of bank credit cards as an acceptable alternative for payment of medical services.
2. That the NMA supports increased public awareness of the problems of child abuse and abuse of the elderly.
3. That the NMA continue to play an active role in

determining the best means of financing health care for the indigent.

4. Your Committee recommends adoption of the Health Policy Statements.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) RESOLUTION #2 — METRO OMAHA MEDICAL SOCIETY — THIRD PARTY PAYORS

This resolution read as follows:

WHEREAS, many patients are now enrolled in or are considering health care contracts with their cost containment provisions;

THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association:

1. Establish a hotline for patients and physicians to report problems and questions;
2. Develop educational efforts for physicians and patients; and
3. Provide workable guidelines for individual physicians to function as the patient's advocate in conflicts with third-party payors.

Considerable discussion was heard in regard to the resolution. All discussants believed that the resolution was in order; however, several questions must be answered before such a resolution could be implemented. The resolution apparently applies to non-Medicare patients and mainly patients covered by health care contracts. The envisioned problems related to the resolution are the costs of such a hotline, the means of establishment of such a hotline, and the feasability of its use.

Your Reference Committee recommends that the resolution be referred to the Board of Directors for consideration and development and be resubmitted to the House of Delegates at the Fall Session, 1986.

MR. SPEAKER, I MOVE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITTEE #6 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
Thomas Wallace, M.D., Gordon, Chairman
Paul E. Collicott, M.D., Lincoln
Wm. Rumbolz, M.D., Omaha

There being no further business, the House was recessed until 4:00 p.m.

House of Delegates

THIRD SESSION

The third session of the House of Delegates was held April 27, 1986. The meeting was called to order by Dr. McFadden, Speaker. Roll call showed 61 delegates present, and the House was declared in session.

Dr. McFadden called for approval of the minutes of the second session, and these were approved.

Harrison L. Rogers, M.D., President of the American Medical Association, was introduced to the House.

The report of the Nominating Committee was called for and Dr. McWhorter, Chairman, presented the following slate:

President-elect —
  L. Dwight Cherry, M.D., Lincoln
Board of Directors, At-Large —
  Donald Pavelka, M.D., Omaha
Delegate to the AMA —
  John D. Coe, M.D., Omaha
Alternate Delegate to AMA —
  Blaine Y. Roffman, M.D., Omaha
Speaker, House of Delegates —
  Alvin A. Armstrong, M.D., Scottsbluff
Councilors —
  9th District - Stanley Nabity, M.D., Grand Island
  10th District - David Little, M.D., Hastings
  11th District - Donald Fischer, M.D., North Platte
  12th District - Donald Wilkinson, M.D., Alliance
Council on Professional Ethics —
  Russell McIntire, M.D., Hastings

The foregoing nominees were elected by acclamation by the House of Delegates.

Dr. McWhorter indicated that the committee was given two candidates for the position of Vice Speaker of the House of Delegates, and the committee would like a vote of the House for this position. The two candidates for this position were Richard Meissner, M.D., Omaha and Craig L. Urbauer, M.D., Lincon. A vote of the House for this position was approved. The ballot count showed that Richard Meissner, M.D., Omaha, won the position of Vice Speaker of the House of Delegates.

There being no further business, the House was adjourned.

ORGANIZATIONS, STATE

American Cancer Society, Nebraska Division, Inc.
Don W. McClure, Exec. Vice President
8502 West Center Rd., Omaha 68124

American Diabetes Association — Nebraska Affiliate, Inc.
Ron Van Ryswyk, Executive Director
7377 Pacific St., Ste. 216A, Omaha 68114

American Heart Association, Nebraska Affiliate
Dennis N. Nissen, Executive Director
3624 Farnam St., Omaha 68131

American Lung Association of Nebraska
8901 Indian Hills Dr., Ste. 107, Omaha 68114

American Red Cross
P.O. Box 83267
1701 "E" St., Lincoln 68501

Arthritis Foundation, Nebraska Chapter, Inc.
Mrs. Ellen Wright, Exec. Director
2229 N. 91st Court, Omaha 68134

Blue Cross and Blue Shield of Nebraska
Wm. H. Heavey, President
P.O. Box 3248, Main Station, Omaha 68180

Creighton University School of Medicine
Richard O'Brien, M.D., Dean
California at 24th St., Omaha 68178

Cystic Fibrosis Foundation, Nebraska Chapter
Charles R. Bercaw, Exec. Director
5017 Leavenworth St., Omaha 68106

Dairy Council of Central States, Inc.
Suite 103, Hillcrest Bldg.
76th & Main, Ralston 68127

Division of Rehabilitation Services
Nebraska Department of Education
6th Floor, 301 Centennial Mall South, Lincoln 68509

Division of Rehabilitation Services for the Visually Impaired
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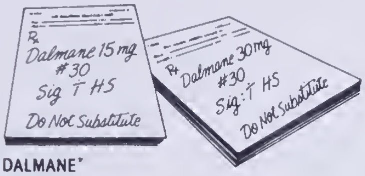
References: 1. Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al. Clin Pharmacol Ther 19* 576-583, May 1976 **4.** Kales A, *et al. Clin Pharmacol Ther 32*:781-788, Dec 1982 **5.** Frost JD Jr, DeLucchi MR. *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al. Behav Med*, pp. 25-31, Oct 1978. **7.** Kales A, Kales JD. *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al.* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984 **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21* 355-361, Mar 1977.



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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening, in patients with recurring insomnia or poor sleeping habits, in acute or chronic medical situations requiring restful sleep Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended Repeated therapy should only be undertaken with appropriate patient evaluation

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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants An additive effect may occur if alcohol is consumed the day following use for nighttime sedation This potential may exist for several days following discontinuation Caution against hazardous occupations requiring complete mental alertness (*e g* , operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion Not recommended for use in persons under 15 years of age Withdrawal symptoms rarely reported, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time Use caution in administering to addiction-prone individuals or those who might increase dosage

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia Consider potential additive effects with other hypnotics or CNS depressants Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported Also reported headache, heartburn, upset stomach, nausea, vomiting diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e g* , excitement, stimulation and hyperactivity

Dosage: Individualize for maximum beneficial effect *Adults* 30 mg usual dosage, 15 mg may suffice in some patients *Elderly or debilitated patients* 15 mg recommended initially until response is determined

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Please see preceding page for summary of product information.

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VOL. 71, NO. 8 AUGUST 1986

THE NEBRASKA MEDICAL JOURNAL

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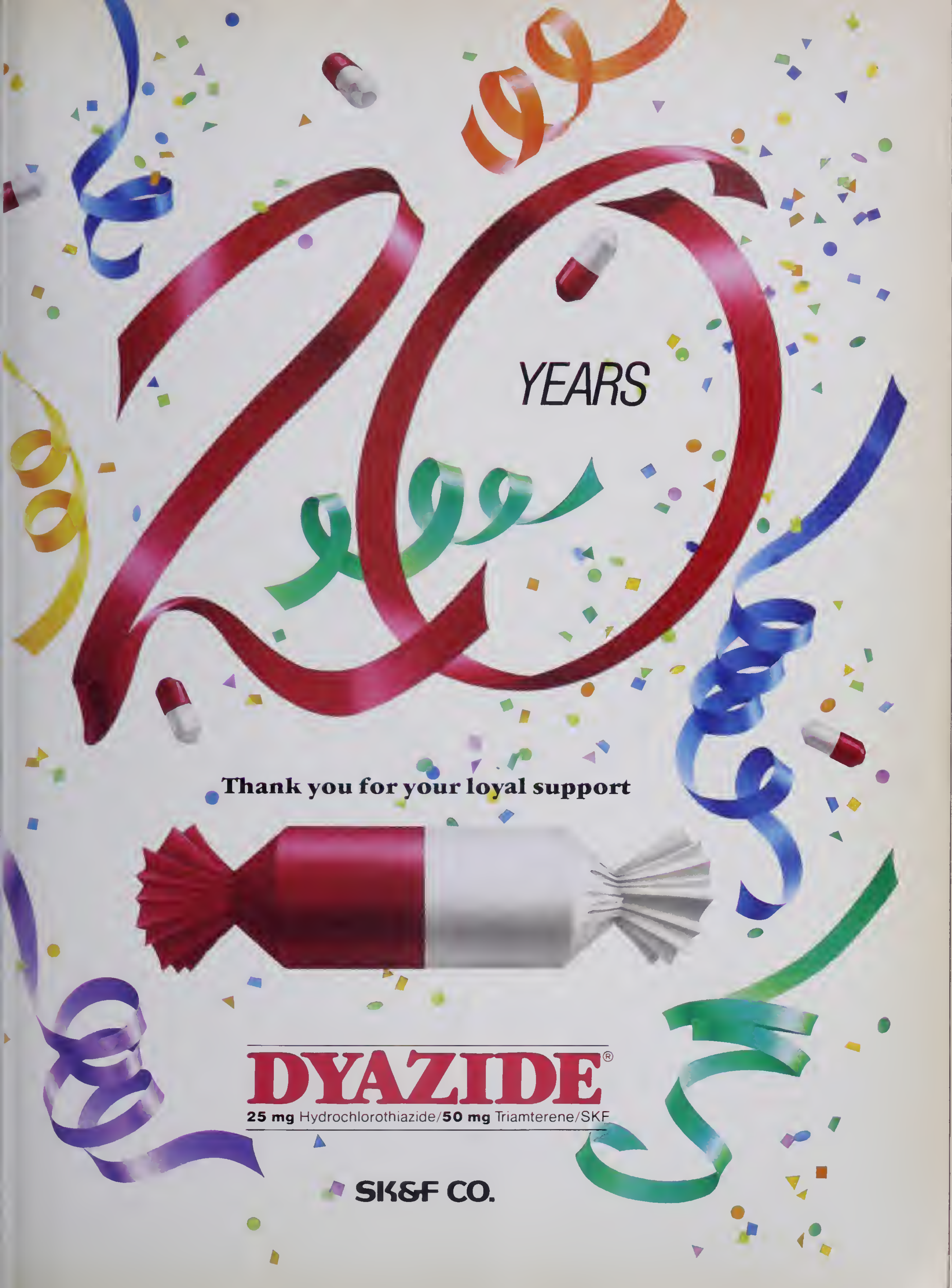

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Review articles will be considered, and should generally be limited to less than 4,000 words and approximately 30 references.

Manuscripts describing original clinical or laboratory research should be limited to 2,000 words and approximately 20 references.

Acknowledgements must be given when material from other publications is included. Provide names of authors, title of article, title of journal or book, volume number, pages, month and year, and publisher's permission to reprint.

Always send a covering letter or letter of transmittal with each manuscript, and refer to the manuscript by its title, in the letter and all correspondence. Do not send a manuscript that was published elsewhere.

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Summary for article: all major scientific articles should be accompanied by a summary at the end of the article, summarizing the key information and recommendations presented.

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Tables and illustrations: should be typed double-spaced on separate sheets of 8½ x 11 in. paper. Each Table should have a title. Illustrations should be prepared professionally and submitted as high-quality, glossy, unmounted black-and-white photographic prints, at least 5 x 7 in. Do not send original artwork. Each illustration should be consecutively numbered and cited in the text. Each photograph should have a gummed label on the back containing the figure number, name of senior author and an arrow indicating top of figure. Legends should be typed double-space for each illustration. Permission to reproduce a picture of a patient is needed, if such a picture is included.

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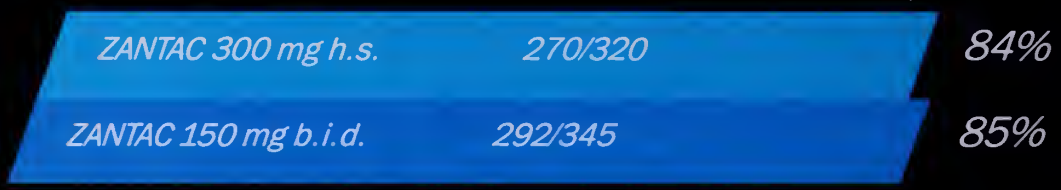


In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

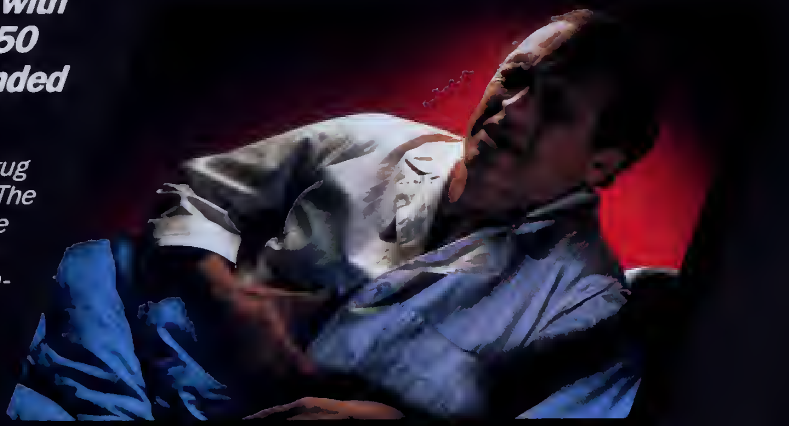
Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH ay be altered when ZANTAC or other medications which decrease gastric acidity are ministered.



not known exactly how much acid inhibition eded to heal ulcers.

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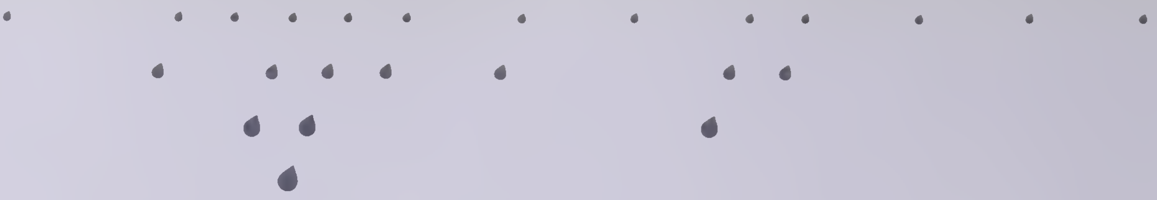
See next page for references and Brief Summary of Product Information.



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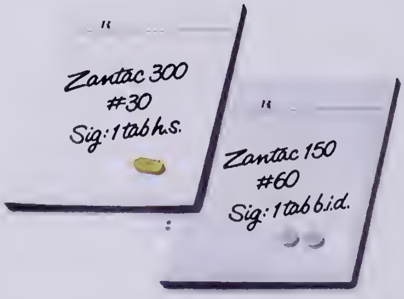

References: 1. Data available on request, Glaxo Inc. **2.** Ireland A, Colin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2:274-275. **3.** Colin-Jones DG, Ireland A, Gear P, et al: Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of active duodenal ulcer. Most patients heal within four weeks. Studies available to date have not assessed the safety of ranitidine in uncomplicated duodenal ulcer for periods of more than eight weeks.
2. Maintenance therapy for duodenal ulcer patients at reduced dosage after healing of acute ulcers. No placebo-controlled comparative studies have been carried out for periods of longer than one year.
3. The treatment of pathological hypersecretory conditions (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of active, benign gastric ulcer. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated. Studies available to date have not assessed the safety of ranitidine in uncomplicated, benign gastric ulcer for periods of more than six weeks.
5. Treatment of gastroesophageal reflux disease. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy.
2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function (see **DOSAGE AND ADMINISTRATION**). Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella, E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients
82 years of age) were no different from those in younger age g
The incidence rates for adverse events and laboratory abnorm
were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as ev
clinical trials or in the routine management of patients treate
oral ZANTAC®. The relationship to ZANTAC therapy has
unclear in many cases. Headache, sometimes severe, seem
related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somno
insomnia, and vertigo. Rare cases of reversible mental con
agitation, depression, and hallucinations have been reporte
dominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, ar
mature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomitin
abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increase
least twice the pretreatment levels in 6 of 12 subjects rec
100 mg qid IV for seven days, and in 4 of 24 subjects rec
50 mg qid IV for five days. With oral administration there hav
occasional reports of reversible hepatitis, hepatocellular or h
canalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granu
penia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have sh
stimulation of any pituitary hormone by ZANTAC and no ant
genic activity, and cimetidine-induced gynecomastia and
tence in hypersecretory patients have resolved when ZANT
been substituted. However, occasional cases of gynecor
impotence, and loss of libido have been reported in male p
receiving ZANTAC, but the incidence did not differ from tha
general population.

Integumental: Rash, including rare cases suggestive of m
thema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, broncho
fever, rash, eosinophilia) and small increases in serum crea

OVERDOSAGE: There is no experience to date with delibera
dosage. The usual measures to remove unabsorbed materi
the gastrointestinal tract, clinical monitoring, and support
apy should be employed.

Studies in dogs receiving doses of ZANTAC® in ex
225 mg/kg/day have shown muscular tremors, vomiting, ar
respiration. Single oral doses of 1,000 mg/kg in mice and ra
not lethal. Intravenous LD_{50} values in rat and mouse were
77 mg/kg, respectively.

DOSAGE AND ADMINISTRATION: Dosage Adjustment for Patie
Impaired Renal Function: On the basis of experience with
of subjects with severely impaired renal function treat
ZANTAC®, the recommended dosage in patients with a cre
clearance less than 50 ml/min is 150 mg every 24 hours
the patient's condition require, the frequency of dosing
increased to every 12 hours or even further with caution. H
alysis reduces the level of circulating ranitidine. Ideally, the
schedule should be adjusted so that the timing of a schedul
coincides with the end of hemodialysis.

HOW SUPPLIED: ZANTAC® 150 Tablets (ranitidine hydro
equivalent to 150 mg of ranitidine) are white tablets embos
"ZANTAC 150" on one side and "Glaxo" on the other T
available in bottles of 60 tablets (NDC 0173-0344-42)
dose packs of 100 tablets (NDC 0173-0344-47).

ZANTAC® 300 Tablets (ranitidine hydrochloride equiv
300 mg of ranitidine) are yellow, capsule-shaped tablets en
with "ZANTAC 300" on one side and "Glaxo" on the other.
available in bottles of 30 (NDC 0173-0393-40) and u
packs of 100 tablets (NDC 0173-0393-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Pro
light. Replace cap securely after each opening.

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Diet and Cancer
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AMA News Notes

In An Effort To Increase Membership Benefits, and to boost non-dues revenue, the AMA has reached an agreement to acquire PRO Services Inc. (PRO), a mutual fund management company headquartered in Blue Bell, Pa. The purchase is subject to approval by the shareholders of the mutual funds managed by PRO. A special meeting of the shareholders for this purpose is scheduled for July.

"The AMA is pleased with its ability to produce a profit center for the association through the purchase," said James H. Sammons, M.D., AMA executive vice president, who added, "We have tried to find non-dues revenue, because that takes the pressure off of the dues payers."

Should the purchase go forward as planned, the AMA plans to rename PRO AMA Advisers Inc. Plans call for a marketing program that would target AMA members as potential investors in the funds. Because of the length of time needed both for shareholder approval of the transaction and for the development of a marketing plan, Dr. Sammons does not expect PRO to contribute much revenue to the AMA in 1986. From 1987 on, however, "the cash flow will depend on the level of participation of physicians and others who buy into the funds,"he said.

"We have bought PRO on a long-term basis, primarily to provide an opportunity for our members. But we expect some cash flow beginning next year, " Dr. Sammons said.

* * *

Physicians must quit looking back to the good old days and the traditional practice of medicine and unify to protect medicine as a calling, rather than a business, said Harrison L. Rogers Jr., MD, in his last address to the House of Delegates as AMA president.

Physicians who have been around for many years must realize that medical practice "is never again going to be what it was. The changes are going to continue and increase, not diminish," Dr. Rogers said. He urged them to stop talking and thinking in terms of what is traditional and what is new.

(Continued on page 15-A)

THE NEBRASKA MEDICAL JOURNAL

Physician Reimbursement: Should We Consider Payment for Office Visits and Consultations at an Hourly Rate?

JERALD R. SCHENKEN, M.D.

EVERYONE seems preoccupied with the cost of medical care, Government, insurers, business, the public, and the profession are all making efforts to reduce costs while maintaining quality. In 1983, Congress "declared war" on hospital costs. The federal government summarily implemented prospective pricing for hospital services based on diagnostic related groups (DRGs) establishing that retrospective cost-based reimbursement was over and that payment for hospital services "on the average" is the way of the future. Even though it is too soon to know the impact of these changes on hospital costs, government and private insurers have now begun to focus on physicians' fees, which constitutes the second largest section (approximately one-fifth) of the health care dollar. In addition, current pressures to reduce hospitalization will necessarily increase the services provided in physicians' offices. All this is occurring in a milieu of increased competition, an ever enlarging pool of physicians and other health care providers, and usual customary reasonable and prevailing (UCR-P) fee schedules which are, currently for all practical purposes, frozen in an unfortunate and illogical way.

Payers claim that total medical costs are too high, that the range of payments for the same service is too wide, the utilization is too great, that hospitalizations are too frequent, and that physicians are being paid for procedures in relative excess of payments for cognitive services. Physicians feel that payments should reflect skill, risk, and training; that there are no such things as procedural services separate and distinct from cognitive services; that most procedures benefit patients and should be adequately reimbursed; that some procedures such as colonoscopy reduce hospitalizations and expenses of surgery and thus are cost effective even if fees are relatively high; and that payments for office visits and consultative services (CPT-4 Codes 90,000 etc.) are unreasonably low and do not compensate physicians for their ever-increasing fixed expenses. All of this debate is occurring at a time when medical malpractice claims are increasing, and premiums and defensive medicine costs are rising out of sight.

Many people in medicine, business, and government are rethinking the method of payment for physician services for office visits and consultations. One suggestion which might productively be explored is to pay for these services on an hourly basis. Examination of this proposal reveals that it would address many of the concerns of both providers and payers. But would it create additional problems?

Time is needed to properly perform the history and physical examination. Studies indicate that physicians need to listen more to patients and, especially for the very old and very young, examine them more frequently in the interest of both preventive and continuing care. Payment by the hour could encourage dialogue between physician and patient. Properly structured, a question and answer session between patient, relatives, and the physician could be very beneficial. Because fixed practice overhead generally accrues by the hour as well, this system would reduce the pressure on physicians to move patients in and out of the office too rapidly.

Complex time consuming medical problems would automatically have increased payments. The current CPT-4 schedule contains a spectrum varying from simple to complex visits or consultations and is one way of doing just that. Unfortunately, for a variety of reasons, physicians are often saddled with unreasonably low profiles for these services and have been forced to cover their fixed overhead in other ways. If the range of payments for these services under the UCR/CPT-4 system were broadened, the goals of payment for **both** skill and time would be achieved. Payment on an hourly basis would decrease the incentives to provide office testing such as laboratory services, x-rays, and electrocardiograms and could lead to more appropriate utilization.

Quality assurance and utilization review of these hourly payments could be performed in a peer review system similar to that which already exists. Other professionals, such as accountants, attorneys, and architects, currently charge by the hour in fair and equitable ways. Deductible and/or copayment requirements would make the patient a partner in the decision of how much time and thus how much money was spent at each visit. Indemnity-type payment schedules could further limit the exposure of employers, insurers, and government if this was desired. Current incentives to encourage provision of services in physicians' offices, whenever medically appropriate, would dictate that copayments be minimized and schedules be reasonable.

Payment by the hour could be made uniform for the provision of similar services or could accommodate variations in payment levels of specialists, if that is desired, allowing for recognition of sophisticated services such as might be provided by an endocrinologist, cardiologist, infectious disease specialist, etc. Finally, payment by the hour would enhance the physician's ability to function as the patient's medical and/or fiscal advisor because dialogue would be increased and the physician would understand more fully the patient's complete medical and social condition.

A change to payments by the hour for physicians' office and consultative services could create problems as well. Peer review might be more difficult because classification of patient's problems and/or illnesses in the office-based setting is not as far advanced as that in the hospital. Utilization of ICD 9 and CPT-4 would need to be studied and found to be applicable in the office setting before such a change should be contemplated.

The changeover might be difficult. If payment by the hour resulted in an increase in payments for these services, appropriate decreases in payments for laboratory, x-ray, etc. services in physicians' offices might have to be made. In some settings, such as rural or inner city, office-based laboratory services are needed to care for patients and payments would have to be adequate in order to maintain them.

One of the most vexing concerns in medical practice is productivity. Physicians vary considerably in their speed, efficiency, thoroughness, and communication skills. The time required by one physician to achieve a desired result may vary considerably from that required by another. Payment on an hourly basis could penalize the medically efficient physician by failing to compensate properly for volume.

Another difficult problem to be resolved would be that of payment to surgical specialties. While payment by the hour could be applicable to primarily medical specialists such as family physicians, psychiatrists, pediatricians, and internists for office visits, it would be very difficult and probably improper to suggest hourly payments for physicians who perform surgery in their office, in ambulatory surgery centers, and/or in hospitals. These services would probably have to continue to be paid on a fee for service, CPT-4 basis. A careful, clearcut definition of which services were covered under which system would have to be developed.

Payments of physicians' office visits and consultative services on an hourly basis is an intriguing option. As with all other options, we must be wary of unintended consequences in our zeal to improve parity and equity for patients, physicians, and payors. For this reason, it would seem appropriate **only** to consider this change after a well designed, carefully controlled, thoroughly evaluated demonstration project utilizing this system on a company-wide, community-wide, or regional basis. In the meantime, payments for office visits and consultations under the current UCR/CPT-4 system should be reviewed and the profiles made more appropriate to continue to encourage physicians and patients to seek medical care in the setting which most properly balances the patient's medical needs with society's desire for a cost effective medical system.

CT Directed Stereotactic Biopsy, A New Neurosurgical Tool

ROBERT J. HACKER, M.D.*
Methodist Hospital, University of Nebraska Medical Center
LESLIE G. HELLBUSCH, M.D.
Methodist Hospital, University of Nebraska Medical Center

THE modern treatment of central nervous system disease depends on accurate histological diagnosis of the pathological process. The similar neurological dysfunction resulting from primary brain neoplasm, brain metastasis or brain abscess makes diagnosis based on clinical findings tenuous at best. No where is the situation of misdiagnosis more tragic than when a benign central nervous system process causes unnecessary morbidity and mortality because it was presumed to be a malignant lesion. The immunocompromised patient with neurological dysfunction adds to this diagnostic dilemma. Unidentified central nervous system infections, unusual neoplasms, and largely treatable lesions may be present in a patient too ill to undergo formal craniotomy. Yet, without histological diagnosis, appropriate therapies cannot be rendered.

Neurosurgeons are often reluctant to recommend craniotomy for biopsy in deep or dangerously situated central nervous system lesions. The ability to identify lesions deep within the hemisphere escapes even the best surgeons at times. Edematous white matter and infiltrating tumors make lesion identification difficult and risks injury to the brain.

Thus, to achieve a standard of care worthy of modern medical practice, the neurosurgeon must be able to provide accurate tissue diagnosis with a minimum of morbidity and mortality. The procedure must be safe for ill patients, and acceptable under local anesthesia.

The merging of classical stereotactic surgery and CT technology allows us to fulfill the above need.[1] In addition, this new surgical tool allows direct tumor, hematoma, or cyst aspiration, implantation of radiation sources and (in the near future) tumor resection.[2, 3, 4] We describe our experience with the Leksell CT stereotactic instrument.

Materials and Method

The Leksell CT stereotactic frame (Fig. 1) was used for all procedures. OPERATION: The procedure consists of three stages; frame attachment, data acquisition, and biopsy.

Frame attachment is achieved under local anesthesia. Usually the patient is in a wheel chair for this portion of the procedure.

Data acquisition and processing commences in the CT scanner. Using a special scanner attachment (adaptable to any scanner), a contrast CT scan is obtained. The patient's brain, brain lesion, and the Leksell frame are plotted in three dimensional space using a rectilinear coordinate system and the scanner's own programs. Optimal biopsy sites are plotted (usually several) and the patient returned to the operating room.

Biopsy commences after the patient returns to the operating room. Local anesthetic is infiltrated and a 1 cm. skin incision is made over a relatively silent area of the brain (the multi-approach targeting arc allows virtually any brain lesion to be approached from any scalp site). A twist drill hole (3/8 inch) is fashioned and the semi-circular biopsy arc attached to the frame. The appropriate biopsy probe is advanced to the pre-determined lesion coordinants and tissue is obtained. Once frozen section confirms a positive biopsy, the frame is removed and a skin suture placed. The patient is observed for two hours then allowed to eat and resume pre-operative activities.

Clinical Base

From December 1983 to December 1985, 19 patients underwent CT directed stereotactic biopsy (Table I). Lesions were documented by

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*Reprints: Robert J. Hacker, M.D., 8111 Dodge Street, Suite 339, Omaha, NE 68114

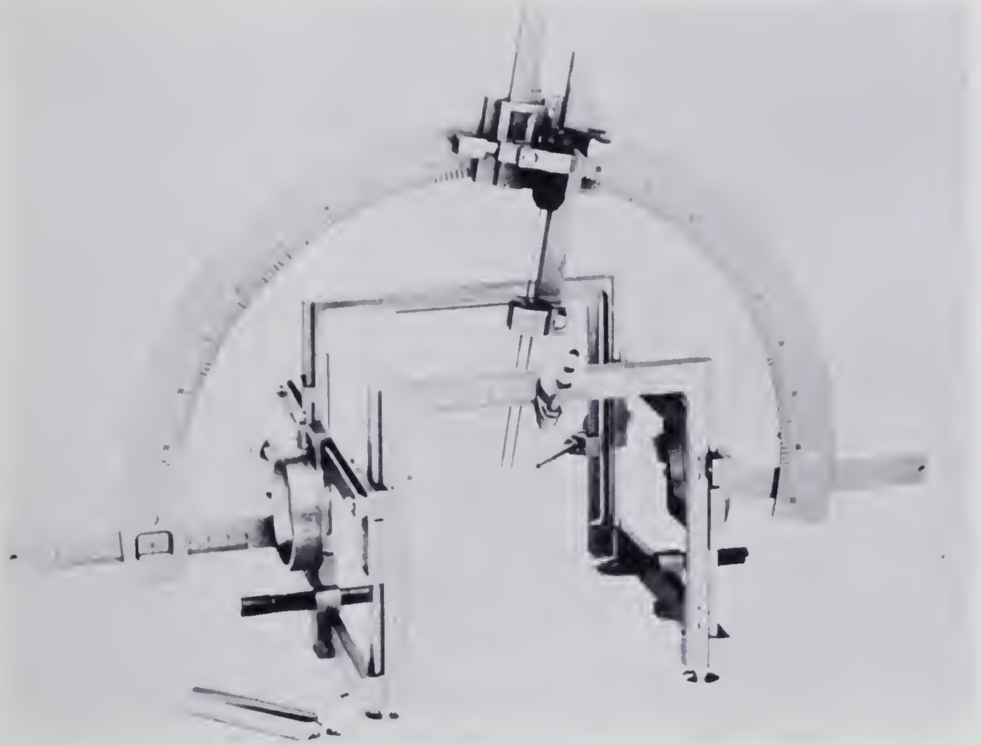

FIGURE 1
The Leksell CT Stereotactic Frame.

TABLE 1
CT STEREOTACTIC CASES
(12/83 - 12/85)

CASE NO.	AGE	SEX	SITE OF LESION	DIAGNOSIS
1	42	M	BILAT HEMISPHERE	LYMPHOMA
2	7	M	DIENCEPHALON	GRADE III ASTROCYTOMA
3	88	M	R HEMISPHERE	MENINGIOMA
4	71	M	L HEMISPHERE	METASTASIS, UNDIFFERENTIATED
5	72	F	R PARIETAL LOBE	GLIOBLASTOMA
6	34	F	R THALAMUS	BRAIN ABSCESS
7	53	M	R FRONTAL LOBE	BRAIN NECROSIS
8	38	M	R PARIETAL LOBE	GLIOSIS, ? OLD CVA
9	73	M	R OCCIPITAL LOBE	METASTASIS, ADENOCARCINOMA
10	63	F	R HEMISPHERE	GLIOBLASTOMA
11	64	M	R FRONTAL LOBE	NON DIAGNOSTIC
12	39	M	R PULVINAR	GLIOBLASTOMA
13	59	M	R OCCIPITAL	METASTATIC RENAL CANCER
14	41	F	R HEMISPHERE	METASTIC LUNG CANCER
15	34	M	L TEMPORAL-PARIETAL	GRADE I ASTROCYTOMA
16	49	F	R TEMPORAL LOBE	GLIOBLASTOMA
17	79	M	L HEMISPHERE	MALIGNANT GLIOMA
18	29	M	R PARIETAL LOBE	MALIGNANT GLIOMA
19	38	D	PINEAL REGION	PINEALCYTOMA

CT scan and stereotactic surgery recommended for one of the following reasons: lesion location, size, CT scan characteristics, or the presence of multiple lesions contraindicating craniotomy. In addition, patients whose age or general health excluded craniotomy were offered stereotactic biopsy.

Results

Pathologic examination of the biopsy material was diagnostic in 18 of the 19 cases. Our one diagnostic failure occurred in a patient with a sizeable and easily targeted lesion who was known to have a lung mass and hemophilia. Vigorous aspiration biopsy was not attempted when gentle aspiration failed to achieve a tissue diagnosis. No patient suffered increased neurological deficit as a result of the procedure. In fact, patient number six showed marked improvement within twenty-four hours of aspiration biopsy. One patient experienced contralateral arm twitching during biopsy of a deep hemisphere lesion. Overall, our post-operative morbidity and mortality rate was zero.

Representative Cases

The following cases illustrate the value and advantages of CT directed stereotactic surgery.

A forty-four year old male presented with headache and progressive aphasia. CT scan demonstrated multiple enhancing brain lesions in both hemispheres suspicious for metastasis (figure 2). Internal medicine evaluation could not confirm tumor elsewhere and he was referred for biopsy. Multiple lesions precluded craniotomy and we recommend stereotactic biopsy. Biopsy confirmed a primary central nervous system lymphoma (a radio sensitive lesion not ammenable to surgery), and external beam radiation was given. Twenty-four months post-biopsy, he is asymptomatic with a normal CT scan (figure 3).

A thirty-eight year old female presented with headache, facial numbness and motor incoordination of the left upper extremity. CT scan (figure 4) was interpreted as malignant neoplasm in the right thalamus. Neurosurgery consultation was requested and we recommended stereotactic biopsy. At the time of biopsy, three cc.'s of yellow pus were aspirated and marked improvement over the next twenty-four hours ensued. Culture and sensitivity

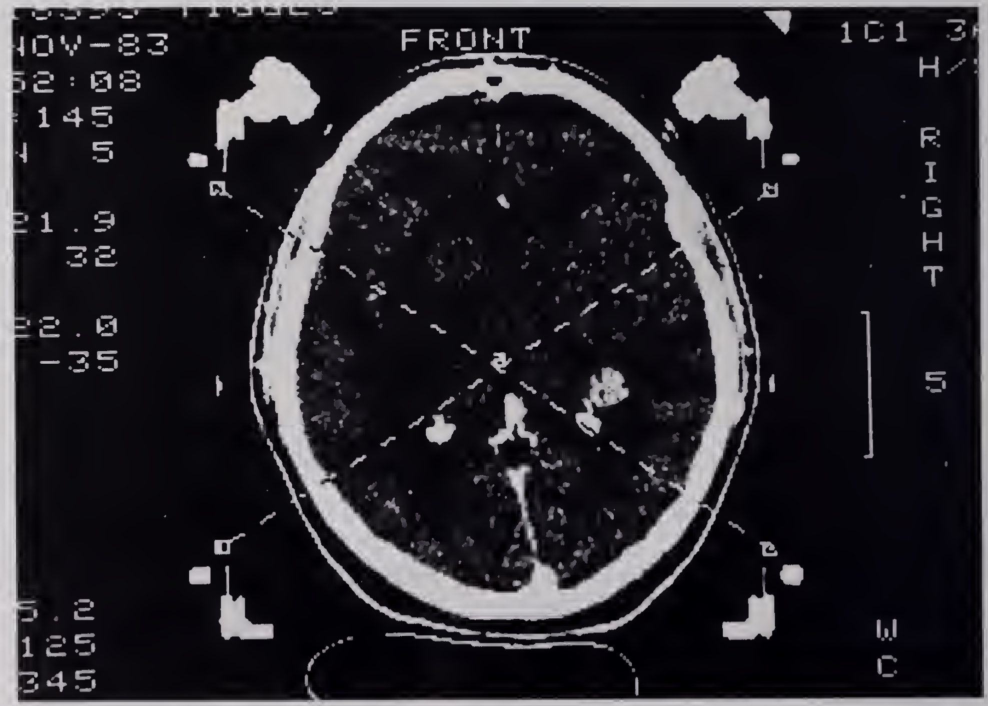

FIGURE 2
Enhanced CT scan showing multiple intracranial lesions. This scan was obtained while the patient was in the stereotactic frame.

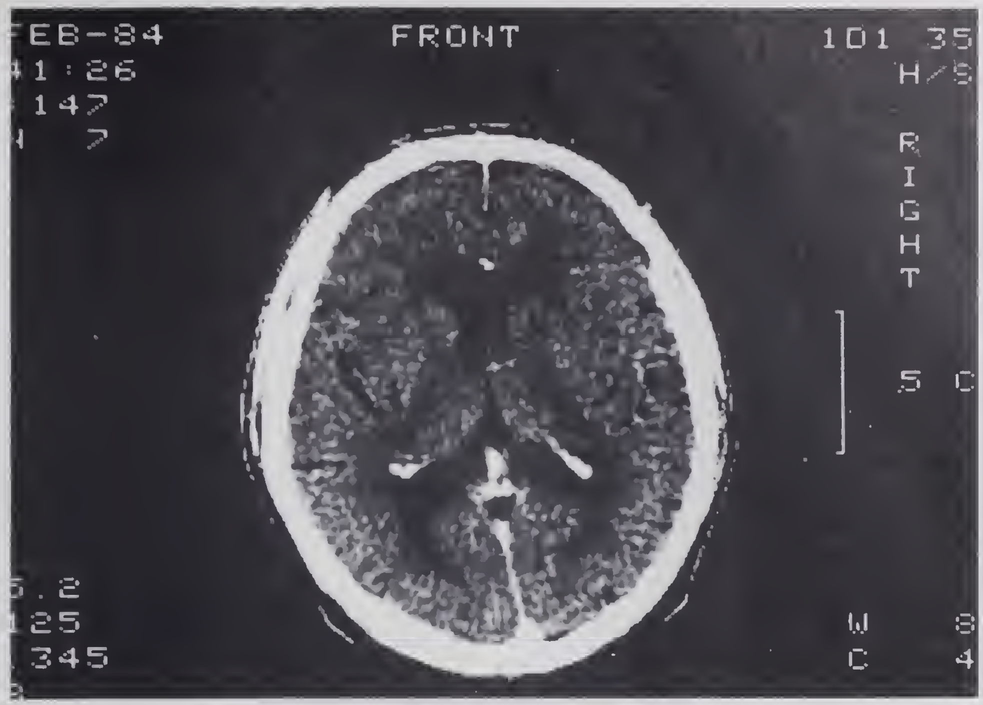

FIGURE 3
The same patient as Figure 2 following radiation and chemotherapy. There has been resolution of the intracranial lesion.

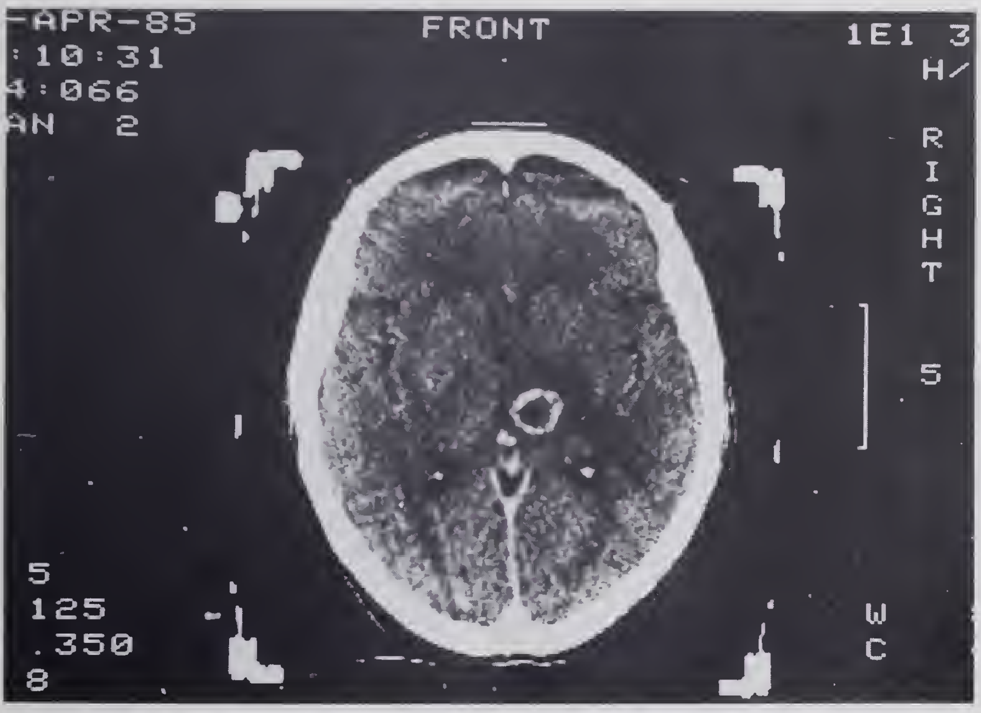

FIGURE 4
A ring enhancing lesion in the right thalmus is identified on contrast scan.

confirmed a brain abscess secondary to an aneorbic strep. Infectious disease treatment with six weeks of intravenous antibiotics resulted in the eradication of the abscess and only residual calcification of the abscess capsule was noted on follow up CT scan (figure 5). The patient is asymptomatic nine months after biopsy.

Discussion

No longer do we view the brain as a black box in which lesions may be identified clinically and radiographically but not histologically.

CT directed stereotactic biopsy allows safe, accurate, and cost effective brain biopsy under local anesthesia. Although training in stereotactic surgery and familiarity with the equipment are essential for accuracy and safety, the technology is easily adaptable to any CT scanning machine. The accuracy of biopsy probe placement is less than 1 mm. and several series document the advantages of the technique over free hand biopsy. The absence of morbidity and mortality in this series is similar to reports by others documenting mortality and morbidity figures less than 4%.[6] Specimens obtained are small and multiple target sites within each lesion allow greater sampling and lessen the chance of non-characteristic or necrotic material being the only specimen obtained. Though we have not yet encountered posterior fossa or brain stem lesions suitable for biopsy, approaches to these privileged sites have been described and performed safely by others.

We plan to expand the uses of stereotactic surgery to include therapy for malignant brain tumor. A protocol is under study for the insertion of radiation sources directly into malignant brain tumors.[7] The literature reports encouraging results with this approach. Further, patients with intracerebral hematoma or hydrocephalus may benefit from CT directed stereotactic surgical treatment.

The advances in medical technology and the search by neurosurgeons for safer approaches to brain diagnosis and treatment have resulted in the evolution of a traditional neurosurgical tool to a modern tool with great potential.

Summary

CT directed stereotactic biopsy is a new approach in diagnosing and treating brain pathology.

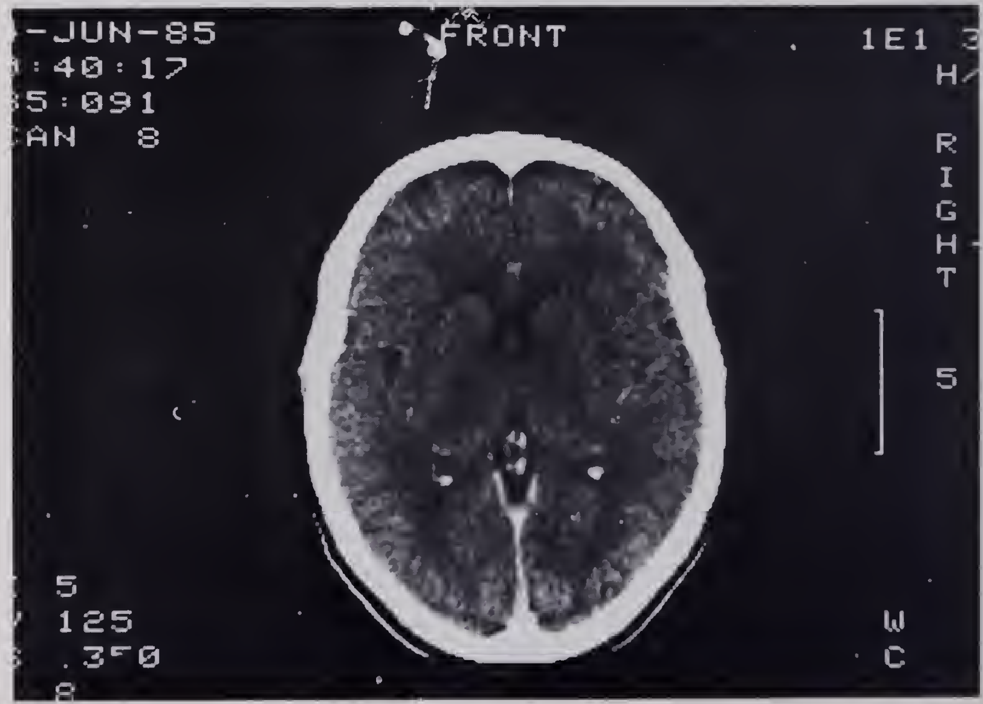

FIGURE 5
Same patient as Figure 4 two months after stereotactic aspiration and antibiotic theapy.

Our clinical series experienced no morbidity or mortality and the technique was diagnostic in 95% of patients.

We plan to employ CT stereotactic surgery in laser resection of tumors, hematoma evacuation and radiation implantation in the near future.

Addendum

We have performed an additional nine CT directed sterotactic surgical cases since submitting our paper for publication. Two of those cases have involved CT directed stereotatic implantation of removable 125-I radiation sources. We have experienced no morbidity or mortality in our last nine cases and biopsy specimens have been diagnostic in all cases.

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Nutrition Knowledge of Family Physicians

STEPHEN R. GRENIER, M.D.*

THE nutrition knowledge of 87 family physicians was surveyed. Results showed limited information in a number of areas. Only those physicians graduating before 1950 had significantly lower scores than the average ($p < .01$). The results further document need for continuing medical education in nutrition for the practicing physician.

Criticism of doctors' nutritional knowledge is a relatively recent phenomenon. The first acknowledgment of this fact came at a conference sponsored by the American Medical Association held at Chicopee Falls, Massachusetts, in 1962.[1] Since that time there have been a number of papers written on the subject. Follow up conferences were held in Williamsburg, Virginia in 1972[2] and in New York in 1983.[3] Congressional hearings were held in 1978[4] and 1979.[5] From 1962 through 1983, which is the latest information available from the Food and Nutrition Unit of the AMA, there were 55 articles on nutrition education or knowledge of medical students and physicians.[6] Of the above list, only three articles have dealt specifically with measuring nutritional knowledge.[7, 8, 9]

The purpose of this study was to determine whether or not this criticism, both public and professional, is warranted. If so, to what extent? Are certain areas more deficient than others? Also, there was interest in finding out if nutritional knowledge was positively or negatively correlated with number of years in practice.

Methods

During the months of July and August, 1985, 300 family physicians were invited to participate in this study. Their names were chosen randomly from the 1985-87 American Academy of Family Physicians Membership Directory, published June 1, 1985. The physicians represented were from Nebraska. They were in either Active or Life Member categories or had just finished a family practice residency. This included members in full and part time practice as well as teaching. These physicians practice in locations ranging from very small towns to the largest city, Omaha. The total number of available physicians from these categories was 472. The study excluded physicians in residency training, full time emergency room practice, administrative positions, and general practitioners who were not members of the American Academy of Family Physicians.

Of the 300 physicians, 121 agreed to participate. They were sent the nutrition questionnaire. The only identifying information requested was year of graduation. Of the 121 agreeing to participate, 87 returned usable questionnaires.

The survey instrument consisted of 30 questions covering six general topics in nutrition: general nutrition, metabolism, vitamins & minerals, protein, fats, and carbohydrates. Twenty-four of the questions were multiple choice and six were true/false. Each question was designed to test nutrition knowledge in a particular area. Traditional theories as well as newer concepts were included.

The results were stratified by year of graduation to facilitate analysis. This was performed as discussed by Feinstein[10] and O'Brien,[11] including use of statistical tables in **Documenta Geigy.**[12]

Results

The distribution of results is shown in Figure 1. The curve is approximately bell-shaped with the exception of no test scores at 47. It is skewed slightly to the left of the most frequent scores, 67 and 70.

Figure 2 demonstrates test results for each physician based on year of graduation. This

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*Address for reprints: Stephen R. Grenier, M.D., Lincoln Clinic, P.C., P.O. Box 81009, Lincoln, Nebraska 68501

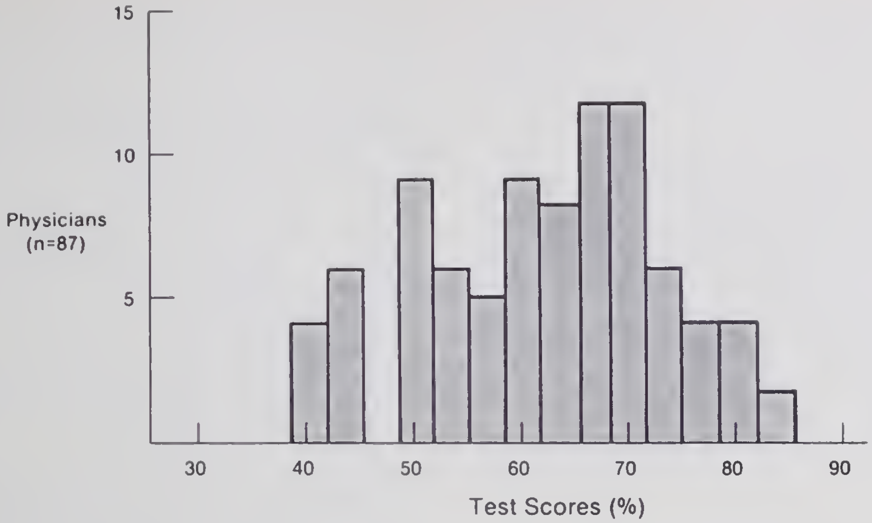

Fig. 1. Distribution of results, showing the number of physicians for each score.

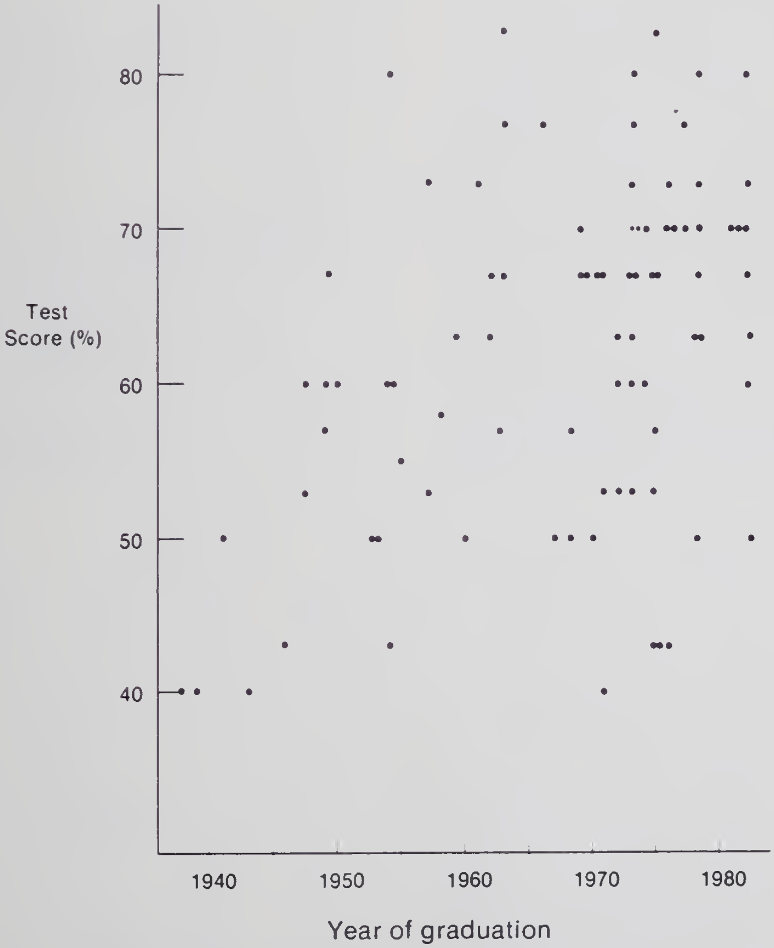

Fig. 2. Scatter diagram showing relationship of test score to year of graduation.

scatter diagram shows a trend for improved score with more recent graduation. However, as can be seen, there is a considerable range of scores.

Table 1 lists a comparison of the total group statistics along with the various stratified groups. All had a wide range of test scores. Only the mean score, 51, for those graduating before 1950 was significantly lower ($p < .01$ by t test) than the average. As can be seen, the scores generally improved with more recent graduation..

Table 2 lists the subject matter of each question and the overall correct percentage.

Discussion

This study has further documented an ongoing need for improved nutrition education. The goals of the project, as stated earlier, was largely met. It was possible to scientifically test for nutritional knowledge.

Some comments about possible areas of study bias should be made. It was acknowledged from the start that there could be several possible areas of bias. Obtaining a perfectly random sample of physicians is not possible. Those completing the test were presumed to have more interest in, and knowledge of, nutrition. Feinstein, in his book **Clinical Biostatistics,** states "One of the most pernicious scientific delusions now prevalent in the world of medical research is the idea that concepts of "random sampling" can be readily applied to clinical populations".[10] It is possible, but unlikely, that some physicians completing the test did so only after researching the answers. Had they done so, their score would have presumably been higher. Another source of bias could have been poorly designed questions and incorrect answers. This concern was addressed by careful question selection and referenced answers.

Based on the results presented, as well as comments submitted by some of the participants, the following conclusions can be drawn:

1. Many physicians are quite interested in nutrition. They regret not having had more training, of a general clinical nature, in their medical education.
2. Nutritional knowledge, like other areas of medicine, varies widely among doctors as a group. Even individual physicians may have excellent working knowledge in one area and poor information in another. Hence, their ability to inform and teach patients may be incomplete.
3. It is not possible to predict nutrition knowledge based on number of years in practice, except that there was a general trend (not statistically significant in graduates since 1950) for lower scores for older physicians.
4. There is a need for continuing medical education courses, offered on a regular basis, for physicians engaged in clinical practice. These should include teaching strategies for nutritional counseling.
5. With less than 50% of the physicians correctly answering the Daily Food Guide questions, it appears this valuable teach-

Table 1 — Comparison of test results by stratified groups

Year of Graduation	All years	< 1950	1950-1954	1955-1959	1960-1964	1965-1969	1970-1974	1975-1979	1980-1983
Physicians Tested	87	10	7	6	8	7	20	20	9
Total Physicians Available	472	57	40	40	38	33	67	80	66
Range	40-83	40-67	43-80	43-73	50-83	50-77	40-80	43-83	50-80
Mean	62	51	58	59	67	63	63	64	67
Median	63	51	60	60	67	67	67	67	70
95% Confidence Interval	59.6-64.4	44.8-57.2	48.7-66.6	50.6-67.3	59.6-74.3	55-71	59-67.6	58.7-69.9	61.6-73

ing tool often isn't understood or used properly.

6. Physicians appear to have inadequate knowledge of nutrition trends and American eating habits. They need to know more about food composition and food science.
7. There continues to be confusion about calcium requirements, no doubt reflecting the information found in the literature.
8. Conservative use of vitamin supplements appears to be the case, consistent with current recommendations.
9. The educational efforts of the importance of HDL cholesterol have been effective with 93% answering correctly.

Many patients expect their family physician to be knowledgable in the area of nutrition. Often they don't know what to eat, particularly if they have a chronic illness. Significant amounts of nutrition information, some correct and some incorrect, are already being dispensed by commercial institutions (e.g. diet programs, vitamin companies, etc.). If physicians are to regain authority in this area, they need to formalize and broaden nutrition education. Although the curriculum in medical schools has been enhanced somewhat, the needs of the physician in practice have been largely forgotten.

Table 2
Overall Results of Individual Questions

	Subject Matter	Percent correct
1.	Recent nutrition trends in the U.S.	49%
2.	Body composition. (water, protein, fat)	52%
3.	Daily Food Guide components.	48%
4.	Criticism of the Daily Food Guide.	46%
5.	Qualification of nutritionists.	72%
6.	Nutritive value of protein, fat, and carbohydrates.	68%
7.	Energy value of one pound.	71%
8.	Average U.S. consumption of protein, fat and carbohydrate.	29%
9.	Caloric requirement of newborns.	63%
10.	Basal caloric requirements of women and men.	76%
11.	RDA for calcium in non-pregnant adults.	44%
12.	Palatable and safe sodium intake.	41%
13.	Dietary iron sources.	66%
14.	Vitamin B-12 characteristics.	90%
15.	Need for vitamin supplements.	93%
16.	Foods furnishing protein of high biologic value.	92%
17.	RDA for protein.	53%
18.	Conditions altering protein requirements.	63%
19.	Characteristics of Nutrasweet.	48%
20.	Protein requirements of the elderly.	43%
21.	Serum cholesterol components.	93%
22.	Daily fat recommendation.	40%
23.	Daily cholesterol recommendation.	72%
24.	P/S ratios of cooking oils.	76%
25.	HDL/total cholesterol ratio.	37%
26.	Differentiation of simple and complex carbohydrates.	76%
27.	Metabolism of glucose.	75%
28.	Caloric content of 5% Dextrose solution.	73%
29.	Soy formula and calcium supplementation.	74%
30.	Characteristics of hypoglycemia.	69%

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APPENDIX:

Test questions, number of responses for each choice, correct answers*, & discussion of answer.

General Nutrition:

1. Which statement accurately reflects a trend, in the U.S., in the past 20 years?

12 A. Whole grain bread outsells white bread.
* 42 B. People are eating more vegetables and fruits.
5 C. Poultry consumption has decreased.
26 D. Soft drink consumption has increased slightly.

Although whole grain breads are becoming popular, white bread is the leading seller. Vegetables and fruits are more available, often throughout the year. Poultry consumption has doubled in the past 20 years and soft drink consumption has tripled since 1960.[1]

2. Which statement is incorrect?

8 A. Water accounts for two-thirds of the body weight.
26 B. Protein makes up approximately 20% of the weight.
* 45 C. Babies have a lower percentage of water than adults.
7 D. Total body fat varies from person to person.

3. The Daily Food Guide includes the following daily servings for non-pregnant adults:

* 41 A. 4 vegetable/fruit, 2 dairy, 4 bread/cereal, 2 meat
34 B. 3 vegetable/fruit, 2 dairy, 3 bread/cereal, 2 meat
11 C. 2 vegetable/fruit, 2 dairy, 2 bread/cereal, 1 meat
0 D. 1 vegetable/fruit, 2 dairy, 2 bread/cereal, 1 meat

The Daily Food Guide is useful for nutrition education. It is taught in most elementary schools, often in the fourth grade. It has received little, if any, attention in medical schools. Some physicians appear to have forgotten its details and usefulness. The public often doesn't know how many portions or servings are needed.

The Guide is summarized as follows:

Recommended Daily Servings

	Adult	Child	Teen	Pregnant/ Nursing Woman	Pregnant/ Nursing Teen
Dairy	2	3	4	4	5
Meat	2	2	2	3	3
V/F	4	4	4	4	4
B/C	4	4	4	4	4

Further details and discussion can be found in any basic nutrition text. This includes what constitutes a serving in each category.

4. A criticism of the Daily Food Guide might be:

8 A. It probably applies to only a small percentage of the U.S. population.
19 B. It provides too many calories for most people.
* 37 C. It makes combination foods, such as casseroles, difficult to classify.
17 D. It is technically difficult to understand.

Although accused of being overly simplistic and inflexible, the Guide remains helpful. It applies to essentially all of the population except infants and those with unusual nutrition requirements because of illness or accident. When only the specific quantities of each group are eaten the caloric intake will range from 1100-1400 kcal. This is less than the daily maintenance amount needed for most children and adults.[1] A number of foods are difficult to classify, including casseroles and the multitude of combination foods that we consume. This limitation can be partially overcome if estimates of the main separate ingredients are made. The guide is quite simple. Elementary students have no difficulty learning it. One net result of it is that it reduces the amount of nutrition information needed about individual foods.

5. A nutritionist may not have a college degree.

* 62 A. True
24 B. False

The term "nutritionist" generally means someone with an undergraduate or graduate degree in nutrition. This may be someone who teaches, performs research or works in the food industry. Nutritionists are not usually licensed or certified by state government. Some self-taught individuals call themselves "nutritionists" or "nutrition counselors".

Registered dieticians, on the other hand, are registered by the state in which they work. They have a baccalaureate degree, at least, plus an internship. Their professional duties include assessment of nutritional status, menu planning, supervision of food service and counseling people about appropriate diets.

Metabolism

6. The nutritive values of food are:

		Protein	Fat	Carbohydrate
2	A.	2 kcal/gm	6 kcal/gm	4 kcal/gm
6	B.	2 kcal/gm	9 kcal/gm	4 kcal/gm
20	C.	4 kcal/gm	9 kcal/gm	6 kcal/gm
* 59	D.	4 kcal/gm	9 kcal/gm	4 kcal/gm

Ethyl alcohol is a separate category, providing 7 kcal/gm, or 5.6 kcal/ml. As an example, one ounce (30 ml) of 86 proof (43% alcohol) whiskey supplies 78 kcal (30 x .43 x 5.6).[1]

7. One pound of fat equals approximately 2500 kcal.

24 A. True
* 59 B. False

One pound equals approximately 3500 kcal.[1]

8. The average distribution of calories in the U.S. is as follows:

* 25 A. 15% protein, 40% fat, 45% carbohydrate
36 B. 20% protein, 30% fat, 50% carbohydrate
6 C. 30% protein, 30% fat, 40% carbohydrate
19 D. 30% protein, 40% fat, 30% carbohydrate

The U.S. distribution is different from many countries. The fat percentage is usually higher and carbohydrate percentage lower. Some populations might receive as much as 80% of their calories from simple and complex carbohydrates.[2]

9. The average newborn infant requires:

14 A. 60 kcal/kg/day
13 B. 75 kcal/kg/day
* 53 C. 115 kcal/kg/day
4 D. 145 kcal/kg/day

The answer 115 kcal/kg/day is an average. For the infant weighing 7½ pounds (approximately 3½ kg), the daily caloric requirement is approximately 400 kcal. Utilizing either breast milk or formula, each supplying about 20 kcal/oz, the daily requirement would be 20 oz.

10. For basal metabolism (at bedrest), women require about .9 kcal/kg/hour and men require about 1.0 kcal/kg/hour.

* 65 A. True
21 B. False

These figures provide a basis for determining daily caloric need and for weight counseling.[1] For the "reference woman" weighing 55 kg (121 pounds), this is 1188 kcal. For the "reference man", weighing 70 kg (154 pounds), this is 1680 kcal.

A more precise measurement of basal energy expenditure (BEE) can be calculated from Harris-Benedict prediction equations.[3] They take into account not just sex and weight, but also height and age.

$$\text{Female BEE} = 655 + 9.6 \times \text{wt(kg)} + 1.8 \times \text{ht(cm)} - 4.7 \times \text{age}$$

$$\text{Male BEE} = 66.5 + 13.8 \times \text{wt(kg)} + 5.0 \times \text{ht(cm)} - 6.8 \times \text{age}$$

For individuals with very sedentary lifestyles, little additional calories are needed beyond basal. On the other hand, those with "average" levels of activity require approximately 35 kcal/kg/day for women and 38 kcal for men.[1] This calculates to be 1925 kcal for a 55 kg woman and 2660 for a 70 kg man.

These are average figures. For both sedentary and moderately active people, the energy requirements of about 70% of the population fall with ± 400 kcal of these norms.[4]

Vitamins & Minerals

11. The Recommended Daily Allowance (RDA) for calcium for non-pregnant adults is:

2 A. 250 mg
14 B. 400 mg
* 38 C. 800 mg
32 D. 1200 mg

The correct answer is 800 mg for children 1-10 years old and non-pregnant, non-lactating adults. Teenagers should have 1200 mg. Pregnancy or lactation require an additional 400 mg.

The figure of 800 mg is controversial. Some nutritionists favor increasing this to 1000-1500 mg to prevent post-menopausal osteoporosis. However, many cultures have calcium intakes well below the RDA, without obvious detrimental effects on bone mineralization or growth.[6]

The Food and Agriculture Organization/World Health Organization recommended in 1962 that intakes of 400-500 mg would meet the needs of most adults in developing countries.[7]

It should be noted that extrapolation to more industrialized countries is misleading because of protein intake (the more protein consumed, the more calcium required), sunlight exposure and manual labor. Obviously the answer to preventing osteoporosis has yet to be found. It most likely is not a simple matter of more and more calcium. Even so, a recent U.S. Government survey, the Second National Health and Nutrition Examination Survey 1976-1980 (the so-called "HANES II"), found that a considerable number of people have calcium intakes below the RDA.[8]

12. For most people a palatable and safe sodium intake per day is:

2 A. .5 gm
* 36 B. 2 gm
45 C. 5 gm
4 D. 8 gm

The sodium intake of most countries far exceeds the body's requirement of .5 - 1 gm daily. All extra sodium must be excreted, creating additional work for the kidneys. While some individuals might complain that a 2 gm sodium diet is not palatable, most can adjust to this level. The subtle, natural flavors of foods are allowed to come through.

13. Good sources of iron in the diet include all of the following except:

* 57 A. Shrimp
9 B. Raisins
1 C. Red meat
19 D. Broccoli

Seafood, other than oysters and clams, is not generally a good source of iron, as opposed to meat, poultry, dark green vegetables, whole grain or enriched breads and cereals, dried fruits, legumes, nuts and molasses.[1] Ten small shrimp have .5 mg iron; ⅓ cup raisins have 1.5 mg; a 3 ounce beef patty 3 mg; and a cup of broccoli has 1.3 mg.[9]

The RDA for menstruating women is 18 mg and men 10 mg. The typical U.S. diet supplies 6 mg/1000kcal. Thus, a sedentary premenopausal woman with a daily maintenance energy requirement of 1500 kcal may only consume 9 mg/day, half her need. Her requirement can be met if she makes a special effort to select foods high in iron.

14. Which statement regarding Vitamin B-12 is incorrect:

3 A. It has the most complex molecular structure of the vitamins and includes cobalt.
0 B. Milk, eggs, cheese, meat, fish and poultry are good sources.
6 C. Vegetarians may become deficient in three to five years.
* 77 D. B-12 shots are quite helpful in a number of conditions, including malaise, nervousness and menstrual disorders.

Vitamin B-12 is found only in animal food sources. Strict vegetarians, eating no meat, eggs or milk, will undoubtedly become deficient without supplementation. The use of B-12 injections for conditions other than pernicious anemia, or its prevention, has no scientific basis.

15. Regarding vitamin supplements, for the healthy individual, the diet that includes recommended levels of the Daily Food Guide, together with some oils for vitamin E, will meet the needs for vitamins.

* 81 A. True
6 B. False

People often assume that their present diet is nutritionally inadequate (unfortunately a correct assumption all too often) and that vitamin and mineral supplements will improve their health, eliminate fatigue, prevent disease and increase longevity. The FDA estimates that 40% of adults in the U.S. take vitamins daily.[17] Many also assume that their individual needs are considerably higher than average because of "stress". These people have very poor or inaccurate nutritional knowledge. They aren't sure what their correct diet should be. Often they don't realize that a well balanced diet with the four food groups and a small amount of oil will probably fulfill their total nutritional needs.

A recent issue of **The Medical Letter** discussed specific conditions needing vitamin supplementation.[18]

A. Newborns should have Vitamin K .5-1 mg IM or orally to prevent hemorrhagic disease.
B. Pregnancy and lactation increase vitamin and mineral needs, particularly folic acid and iron.
C. Low calorie diets, providing less than 1200 kcal, may have marginal vitamin levels. This often includes the elderly, infirm, alcoholics, anorectics, and some vegetarians.
D. Malabsorption syndromes may lead to multiple deficiences, particularly B complex and folic acid.
E. Osteodystrophies or hypoparathyroidism may require Vitamin D.

Protein

16. The following are foods furnishing protein of high biologic value except:

2 A. Eggs
0 B. Meat, fish
* 78 C. Cereals
5 D. Milk, cheese

All essential amino acids are needed for complete protein synthesis. Foods supplying all of them are of "high biologic value" or "complete". They should provide at least one-fifth of the daily protein for adults and two-fifths for children. Three-fifths of the protein in the average American diet is of high biologic value.[10]

17. The RDA for protein, excluding pregnancy, is:

5 A. .2 gm/kg
* 45 B. .8 gm/kg
27 C. 2.5 gm/kg
8 D. 4.0 gm/kg

Many Americans consume excess protein. The RDA of .8 gm/kg provides adequate amino acids for tissue synthesis and maintenance. For the reference man of 70 kg, 56 gm protein are required. The reference women of 55 kg requires 44 gm.

Exceptions to .8 gm include: infants, 2.2 gm; pregnancy, additional 30 gm; lactation, additional 20 gm. Certain diseases raise or lower the protein requirement (see Question 18).

18. Protein requirements are increased in all of the following except:

0 A. Burns
5 B. Nephrotic syndrome
* 53 C. Renal failure
26 D. Hepatitis

Protein requirements for severe burns may be as high as 2.5 gm/kg, with 150 gm/day an average figure. Nephrotic syndrome may require 120 gm/day to prevent catabolism. The requirement for hepatitis is not as high, 100 gm/day being an average. Still, this is almost double the normal requirement.

In renal failure, protein should be restricted to less than .5 gm/kg. If the azotemia has progressed to the point of hemodialysis, the requirement is slightly more than normal. If peritoneal dialysis is used, the requirement is 1-1.5 gm/kg.

Increased protein can be supplied by additional meat (7 gm/ounce) or by adding powdered milk to liquid milk. 4-5 tablespoons added to 8 ounces of milk increase the protein from 8 gm to 16 gm.

19. Which of the following characteristics of aspartame (Nutrasweet^{R}) is incorrect:

2 A. It is a dipeptide, composed of phenylalanine and aspartic acid.
11 B. It is 200 times sweeter than sucrose.
30 C. It provides 4 kcal/gm.
*39 D. It is heat stable.

Aspartame was accidentally discovered in 1965.[19] Manufactured by Searle, it was first licensed by the FDA in 1974. It took until 1981 to resolve certain safety issues. At that time it was approved as a food additive. In 1983 it was approved for use in carbonated beverages. As a peptide, it provides 4 kcal/gm. It decomposes slowly in liquids or when exposed to high temperatures. In beverages stored eight weeks at 68° F, 16% - 19% of it had decomposed. At 86° F, 38% of it had.[11]

20. The elderly generally require 30% less protein than young adults.

50 A. True
*37 B. False

Although somewhat controversial, most authorities feel that protein requirements remain constant throughout life. Young athletes, doing prolonged exercise, such as marathon training or heavy weight training, may require mild increase in protein. Although energy requirements decline an average of 2% each decade, the protein requirement does not.

Fats

21. What fraction of cholesterol appears to provide protection against arteriosclerosis:

3 A. LDL
0 B. IDL
*79 C. HDL
3 D. None

High-density lipoprotein (HDL) cholesterol levels show a strong inverse relationship to coronary heart disease.[12, 13] This data, as well as a wealth of information about the epidemiology and natural history of cardiovascular disease, first came from the Framingham study. This project started in the early 1950's. The cohort of patients in the study has now been followed for over 30 years.

The HDL moiety helps clear cholesterol from body cells, taking it back to the liver.[14] Degradation in the liver is by the enzyme lecithin cholesterol acetyl transferase. The new product, cholesterol esters, is then excreted as bile salts.[15] LDL is the prime carrier of cholesterol, at least 50% - 60%. LDL-receptor sites allow cholesterol to enter cells. Thus high levels of this component are strongly correlated with coronary heart disease.[16] LDL cholesterol is calculated as follows:

$$\text{LDL cholesterol} = \text{Total cholesterol} - \text{HDL} - \frac{\text{Triglycerides}}{5}$$

22. It has been recommended that daily fat consumption be reduced to a maximum of:

*35 A. 30%
38 B. 15%
12 C. 10%
2 D. 5%

Lowering Blood Cholesterol to Prevent Heart Disease was the subject of a December, 1984 Consensus Development Conference. It was sponsored by the National Heart, Lung, and Blood Institute and the National Institutes of Health, Office of Medical Applications of Research. The panel recommended reducing the total dietary fat intake from the current level of about 40% of total calories to 30%.[20]

23. Daily cholesterol intake for the average person should not exceed:

10 A. 100 mg
*62 B. 300 mg
12 C. 450 mg
2 D. 550 mg

The Consensus panel mentioned previously recommended that daily cholesterol intake not exceed 300 mg.[20] The cholesterol content of the average U.S. diet is reportedly the same today as it was in the early part of the century, about 500 mg/day.[21] The serum cholesterol level is not necessarily related to dietary cholesterol. There is considerable variation, although hypercholesterolemia usually occurs with high cholesterol intake. Principle dietary sources include: liver 372 mg/3 oz; veal, lamb and beef 80-86 mg/3 oz; egg 252 mg; shellfish 128 mg/3 oz; poultry 74 mg/3 oz; fish 43-60 mg/3 oz; whole milk 34 mg/8 oz; ice cream 27-49 mg/½ cup; and cheese 28 mg/oz.[22]

One of the most important dietary factors affecting serum cholesterol is the amount of saturated and polyunsaturated fatty acids (see Question 24.)

24. Which of the following oils have the highest polyunsaturated fatty acids/saturated fatty acids (P/S) ratio:

7 A. peanut, palm
10 B. corn, soybean
4 C. cottonseed, coconut
*65 D. safflower, sunflower

The P/S ratios, as calculated by the U.S.D.A.[23], are as follows:

peanut	4.6	palm	.9
corn	6.5	soybean	5.6
cottonseed	2.7	coconut	.08
safflower	9.5	sunflower	8.3

The amount of saturated fats in the diet predictably alters the serum cholesterol level, regardless of the amount of cholesterol consumed. If saturated fatty acids are replaced by polyunsaturates, a 25% - 30% lowering of total cholesterol and the LDL cholesterol fraction can be expected.[24, 25]

25. The HDL fraction of cholesterol should be at least what percentage of the total cholesterol:

8 A. 10%
*30 B. 20%
35 C. 30%
9 D. 50%

The minimum acceptable percentage is 20%.[12] A better value would be 25% - 30%. Raising the HDL fraction has become the focus of considerable attention in recent years. Factors known to increase it include exercise, mild alcohol consumption, smoking cessation, eating fish containing eicosapentanoic acid (EPA, a polyunsaturated fatty acid found in fish such as salmon), estrogens and triglyceride reduction.

Carbohydrates

26. Which of the following is not a complex carbohydrate:

4 A. Starch
9 B. Cellulose
*66 C. Fructose
8 D. Glycogen

Fructose, sometimes called fruit sugar or levulose, is a simple monosacharide. When sucrose is digested, the components are fructose and glucose. It is found in fruits, vegetables, corn syrup and honey. On a gram-for-gram basis, it is slightly sweeter than sucrose.[10]

27. Glucose is normally completely metabolized to:

*64 A. Carbon dioxide and water
1 B. Oxygen and bicarbonate
8 C. Carbon, oxgyen and hydrogen
12 D. None of the above

$$C_6H_{12}O_2 + 6\ 0_2 + \mathrm{ADP} \longrightarrow 6\ CO_2 + 6\ H_2O + \mathrm{ATP}$$

28. One liter of 5% Dextrose provides how many calories:

14 A. 400
6 B. 600
3 C. 800
*63 D. None of the above

There are 50 gm of glucose in one liter. At 4 kcal/gm, this results in 200 kcal.

29. Lactase-deficient infants on soy formula need calcium supplements.

22 A. True
*62 B. False

Commercially prepared soy formulas provide adequate amounts of vitamins and minerals, including calcium.[26]

30. Which statement about hypoglycemia is incorrect:

0 A. It is frequently blamed for causing headaches, nervousness and weakness.
*59 B. It has seasonal variation.
11 C. It is diagnosed by oral glucose tolerance test.
16 D. It is treated with a low carbohydrate diet.

Hypoglycemia is a popular idea used to explain a number of symptoms. Seasonal variation has not been demonstrated. A five hour GTT is usually the diagnostic test of choice. By feeding frequent, low carbohydrate meals peak insulin secretion is blunted, thereby reducing rebound hypoglycemia.

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Pharmacologic Management of Asthma in Infants and Young Children

BRETT V. KETTELHUT, M.D.*
Medical Staff Fellow, National Institutes of Health
Bethesda, Maryland
ROGER H. KOBAYASHI, M.D.
Associate Professor of Pediatrics, Pathology and Microbiology, University of Nebraska Medical Center, Omaha, Nebraska
AILAN D. KOBAYASHI, M.D.
Clinical Assistant Professor of Pediatrics, University of Nebraska Medical Center, Omaha, Nebraska

ASTHMA is a common, yet frequently underdiagnosed and undertreated disease in childhood. As many as 5-10% of children under the age of 17 years have intermittant asthma, while 4% have chronic, persistent symptoms. In addition, as many as 50% of children with allergic rhinitis have bronchospasm when they exercise. Among chronic diseases, asthma is the leading cause of school absences and hospitalizations. Therefore, appropriate control of symptoms is mandatory if we are to improve the quality of life for these children and decrease health costs. The major goals in the management of childhood asthma include: normal sleep, normal play activities, regular school attendance and decreased emergency room visits/hospitalizations.[1]

Asthma is characterized by intermittant, but reversible obstruction of the bronchi and bronchioles due to smooth muscle contraction, increased mucous secretion, and inflammation. Many things can provoke an asthma attack, but allergies, viral infections, noxious stimuli and exercise (termed exercise induced asthma) are the most common factors. An asthma attack can be divided into two pathophysiological processes: 1) bronchospasm; and 2) increased mucous production with inflammation. Recognition of these processes is vital as treatment needs to be directed at both pathologic aspects.

Asthma presents a broad clinical spectrum of severity with symptoms varying from time to time requiring that the physician tailor a specific treatment regimen for each child and follow the youngster regularly. It would be inappropriate to see the child only during acute attacks or when the child is hospitalized. A grading scale of severity of childhood asthma has been proposed by Ellis[2] as shown on Table 1. The thrust of this paper will be on the pharmacologic management of outpatient asthma and not the management of status asthmaticus which has been reviewed extensively elsewhere.[3]

In a child whose asthma is triggered by noxious stimuli (e.g. cigarette smoke, odors) or allergies (e.g. mold; ragweed pollen), identification of provoking factors and avoidance measures are of utmost importance. In some patients, agressive environmental control may be sufficient to control symptoms. In a majority of cases however, adjunctive pharmacological management is required.

Beta Sympathomimetics

The beta adrenergic drugs are the most potent and rapid-acting bronchodilators available. Although distinguished by long and valuable service, isoproterenol (Isuprel ™) and isoetharine (Bronkosol ™) are obsolete and are no longer recommended. Newer, more selective agents such as metaproterenol, terbutaline, albuterol, fenoterol and bitoterol are effective and safe.[9, 10, 11] Aerosols such as albuterol and bitoterol may be effective for as long as 4-8 hours. Both oral and aerosolized preparations by metered dose inhaler (MDI) and nebulized forms are available as shown in Table 4. For children who can master the use of aerosols, usually 5 years or older, the aerosol preparation provides a significant advancement in the management of bronchospasm by delivering of the drug directly to the bronchial airways. This requires a lesser amount of the drug and reduces the incidence of systemic side effects.[12]

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*Reprint requests: Brett V. Kettelhut, M.D., Medical Staff Fellow, National Institutes of Health, Bethesda, Maryland

In the child with mild asthma or exercise-induced bronchospasm, the use of an aerosol may be all that is required for effective control. In the case of exercise-induced asthma, inhaled beta adrenergic drugs are the most effective agents. Inhalation of albuterol, bitoterol or metaproterenol 15 to 30 minutes before exercise can often enable the child to play vigorously for 3 to 6 hours without difficulty. Some children, regardless of age, can not master the use of a metered dose inhaler aerosol, in which instance an aerosol rebreathing bag,[13] tube spacers, or a home nebulizer is a reasonable alternative.

Theophylline Compounds

Theophylline is the most widely used bronchodilator for the acute and chronic management of asthma in the United States today. For many practitioners, theophylline compounds are the principal pharmacologic choice. While numerous rapid and sustained-release preparations are available, appropriate selection depends on anticipated length of treatment, palatability, compliance and dosage. It is also important to remember that some theophylline compounds are not reliably absorbed and that further, food may affect the rate of absorption from the GI tract. Table 2 lists the theophylline preparations which have been found to be reliable for use in the pediatric population. Optimal bronchodilitation is usually achieved with a serum level of 5 to 20 ug/dl. Since theophylline metabolism varies with the child's age, it would be prudent to check a peak serum theophylline level before exceeding the average daily dosage established by Weinberger et al (Table 3). It must be emphasized that many factors besides age can affect theophylline metabolism and clearance. Decreased clearance (increased theophylline levels) can result from viral illness, hepatic failure, congestive heart failure, hepatitis, fever, or the concomitant use of erythromycin or cimetidine. Increased clearance can be seen in cigarette smoking or the concurrent use of anti-seizure medications. As gastrointestinal upset and hyperactivity are common side effects when first using theophylline, it is advisable to start at one-half to two-thirds the usual recommended dose and increase gradually over the next several days or weeks until the recommended dosage is achieved. Additional minor adverse reactions can include sleep disturbance, irritability and

TABLE 1

Classification of Data

MILD:	Attacks less than once a week Response within 24-48 hours to bronchodilators Asymptomatic between episodes No exercise intolerance Uninterrupted sleep at night Regular school attendance Normal chest x-ray Normal pulmonary function testing (PFT)
MODERATE:	Attacks more than once a week Low grade symptoms between attacks Decreased exercise tolerance Occasional interrupted sleep at night Occasionally misses school Mild hyperinflation on x-ray and exam Signs of airway obstruction and increased lung volume on PFT
SEVERE:	Daily symptoms Frequent severe exacerbations often with cyanosis Frequent hospitalizations Poor exercise tolerance Frequent sleep interruption at night Frequently misses school Significant hyperinflation on x-ray and exam Significant signs of airway obstruction and increased lung volume on PFT

TABLE 2

Theophylline

Drug Class	Brand Name.	Available Forms	Dosing Interval
Rapid Release	Aminophylline (85% Theophylline)	Tablets 100 mg 200 mg 300 mg	every 6 hrs.
	Somophylline	Liquid 100 mg/5 ml	every 6 hrs.
	Slo-phyllin	Liquid 80 mg/15 ml	every 6 hrs.
Sustained-Release	Slo-Bid	Gyrocaps 50 mg 100 mg 200 mg 300 mg	every 8 to 12 hrs.
	Theo-Dur	Tablets (scored) 100 mg 200 mg 300 mg	every 8 to 12 hrs.
		Sprinkles 50 mg 75 mg 125 mg 250 mg	every 8 to 12 hrs.
	Slo-phyllin	Gyrocaps 60 mg 125 mg 250 mg	every 6 to 8 hrs.
	Quibron T-S/R	300 mg	every 8 to 12 hrs.

poor school performance. In serious theophylline toxicity, hematemesis and seizures can be seen.

Sustained release theophylline preparations are perferred because of their ease of administration and decreased frequency of daily administration. While early reports suggested that optimal serum concentrations of theophylline could be maintained on an every 12 hour dosing schedule,[4] further assessment revealed that some children require an every 8 hour schedule to maintain adequate serum levels.[5, 6, 7] Recently, it has been shown that both a decrease and delay in absorption of theophylline from sustained released preparations can occur when taken with food. In one preparation (Theo 24™) serious toxicity can result if taken with meals ("dumping phenomena"). Given the problems of absorption when taken with food, it would seem prudent to give sustained release tablets or capsules before meals. Further, patients should be cautioned against chewing sustained-release tablets as this will cause rapid release of theophylline. The use of theophylline suppositories has no place in the treatment of asthma due to erratic absorption resulting in severe toxicity and occasional deaths. A rectal solution (Rectal Somophylline® 250 mg/5cc) has been shown to be reliably absorbed and can be used in those rare patients who cannot or will not swallow oral theophylline preparations.

TABLE 3
Usual Theophylline Dosage

Age	Dose
1 - 9 years	24mg/kg/24 hrs
9 - 12 years	20mg/kg/24 hrs
12 - 16 years	18mg/kg/24 hrs
Adults	12mg/kg/24 hrs

Steroids

Corticosteroids have two roles in the management of outpatient asthma. The first is a short, intensive oral course (burst) as an adjunct in acute bronchospasm[14] and the second is where there is chronic, severe asthma resistant to all other treatment. The acute action of corticosteroids is to increase response to beta agonists, while more prolonged usage suppresses bronchial inflammation, mucosal edema and mucous production. For acute exacerbations of asthma, the short-term addition of oral prednisone or methylprednisolone can frequently prevent progression to more severe disease, thus avoiding emergency room visits or hospitalizations. The optimum dose or dosage schedule is not yet known, but typically prednisone or methylprednisolone is given orally 1-2mg/kg/day in 3

TABLE 4
Beta Agonists

Brand Name	Available Forms	Dosing Interval
Metaproterenol (Alupent, Metaprel)	Tablets 10 mg 20 mg	less than 60 lbs. 10 mg TID-QID greater than 60 lbs. 20 mg TID-QID
	Syrup 10 mg/5 ml	less than 6 years of age total daily dosage not to exceed 1.3-2.6 mg/kg
	MDI	2 puffs every 4 hours
Albuterol (Proventil/Ventolin)	MDI	2 puffs every 4-6 hours
	Tablets 2 mg 4 mg	Persons 12 years and older 2-4 mg TID-QID
	Syrup 2 mg/5 cc	2-6 years - 0.1 mg/kg TID (not to exceed 2 mg TID) 6-14 years - 2 mg TID-QID
Bitoterol (Tornalate)	MDI	2 puffs every 6-8 hours
Terbutaline (Brethine, Bricanyl)	Tablets 2.5 mg 5 mg	Persons 12 years and older 2.5-5 mg BID-TID
	Solution (1 mg/cc)	SQ 0.005-0.01 cc/kg not to exceed 0.25 cc. Also used in nebulizers
MDI - Metered Dose Inhaler	MDI	2 puffs every 4-6 hours

divided doses for 5 days or as a single morning dose tapered over 7-10 days. The use of long-acting steroids (i.e. Dexamethasone or triamcinolone) orally or by injection is to be avoided since prolonged adrenal suppression can result.

A major advancement in the treatment of chronic asthma has been the introduction of safe, effective aerosolized steroids. Available preparations include beclomethasone dipropionate, flunisolide and triamcinolone (Table 4). Unlike steroid bursts, aerosolized steroids are not used in acute asthma attacks but as an important addition in the treatment of chronic, severe asthma. Aerosolized steroids are generally preferable to oral steroids as the recommended aerosolized dose has not resulted in hypothalamic-pituitary-adrenal suppression, growth retardation. Cushingoid features or cataract formation.[15] There are preliminary data to suggest that daily aerosolized steroids may be more effective than alternate-day systemic steroids.[16] The child must be reminded to rinse his mouth after use of an aerosolized steroid to prevent oral candidiasis. While beneficial, aerosolized steroids have several disadvantages which include: high costs, inconvenience of administration and lack of suitable compounds for very young children. In summary, steroids if used properly, can be highly effective agents in the treatment of asthma.

Cromolyn

Aerosolized cromolyn sodium (Cromolyn) represents a separate and safe alternative in the treatment of asthma.[17] This drug prevents the release of inflammatory mediators and thus is an effective prophylactic agent against bronchospasm. Cromolyn is not an active bronchodilator and thus cannot be used intermitantly to control acute episodes of wheezing. It is effective in mild to moderate asthma, exercise-induced asthma and allergic asthma. Three forms of administration are currently available: an aerosolized powder (spinhaler), a metered dose inhaler, and as a nebulized solution (Table 4). In some children the powder causes reflex bronchospasm (coughing) which may be troublesome, curtailing its use. The drug is administered 4 times a day, generally preceded by an aerosolized beta adrenergic agent to allow a wider intrapulmonary distribution. After 2 to 6 weeks, it may be possible to reduce the frequency of

TABLE 5
Glucocorticoids

Brand Name	Available Forms	Dosing Interval
Prednisone	Tablets 1 mg, 2.5 mg, 5 mg, 10 mg, 20 mg, 25 mg, 50 mg	1-2 mg/kg/day. Maximum 60 mg/day
Liquiped™	5 mg/5cc	
Methylprednisolone (Prednilone™)	15 mg/5cc	
Beclomethasone dipropionate (Beclovent, Vanceril)	MDI	1-2 puffs (42 or 84 ug) TID-QID in children 6-12 years
Triamcinolone (Azmacort Inhaler)	MDI	Children 6-12 years of age 1-2 puffs 3-4x/day. Adults 2 puffs 3-4x/day
Flunisolide (AeroBid Inhaler)	MDI	Children 6-15 years old 2 puffs twice daily (maximum dose). Adults 2 puffs twice daily (**not** to exceed 4 puffs 2 times a day - this dose can cause pituitary & adrenal suppression)

MDI - Metered Dose Inhaler

TABLE 6
Cromolyn Sodium

Brand Name	Available Forms	Dosing Interval
Intal	Spinhaler 20 mg	1 capsule QID and decrease as tolerated
	Solution (20 mg/2 cc)	20 mg QID by compressor or ultrasonic nebulizer
	MDI	2 puffs QID

administration to 3 and occasionally 2 times a day. Some patients with exercise induced asthma may only require cromolyn prior to the anticipated exercise to control symptoms. Studies have shown that prolonged use of cromolyn results in reduced bronchial hyperactivity. More importantly, cromolyn may allow discontinuation or reduction in use of both bronchodilators[18] and steroids.[19] Unfortunately, cromolyn is inconvenient to administer (Spinhaler™, nebulizer), relatively expensive, ineffective in the treatment of acute asthma and often must be used for quite some time before therapeutic effects can be seen. Other cromolyn-like compounds have been studied, but to date none have been particularly promising.

Immunotherapy

While technically not considered under pharmacologic management, immunotherapy (allergy shots) remains a treatment alternative which may be beneficial in selected atopic children who have chronic asthma. The initial evaluation for a suspected allergic child should be performed by an allergist to determine whether allergens may be aggravating the asthmatic condition. Recent studies suggest that immunotherapy may help to control asthma[20] and long-term, multi-center studies sponsored by the National Institutes of Health are presently ongoing.

Recommendations

It must be emphasized that avoidance of aggravating factors, early recognition, patient education and agressive, early intervention are necessary to assure optimal control of asthma. While drugs have contributed immensely in controlling asthmatic symptoms, prevention and recognition of provoking factors **must not** be ignored. Treatment of asthma is based on severity (Table 7). For the patient with "mild" or occasional asthma, a beta adrenergic inhaler or a sustained-release theophylline preparation is used. Typically the length of required treatment lasts from 3 to 7 days depending on the child. Treatment should be started early and continued long enough to prevent progression to more acute, severe attacks. Children with "moderate" asthma require daily use of a beta adrenergic drug and/or a theophylline preparation for control of their symptoms. Cromolyn would be an appropriate addition for this group of asthmatic children. Steroid "bursts" may be necessary to manage acute exacerbations and the physician should not be reluctant to use short-term steroids if appropriately required. Those few children who have severe asthma usually require steroids either as an aerosol (preferred) or systemically in addition to the beta agonists, theophylline compounds and/or cromolyn. Management of severe childhood asthma often requires the guidance of an Allergist or Pulmonologist to optimize the benefits and decrease the undesirable side-effects of pharmacotherapy. Immunotherapy should be reserved for those select children who are likely to benefit from such therapy.

TABLE 7
Therapeutic Recommendations

Asthma Severity	Treatment Options
MILD	Intermittant Beta Agonist (preferably by aerosol) Intermittant Theophylline
MODERATE	Daily Beta Agonist Daily Inhaled Cromolyn Daily Theophylline Intermittant Oral Steroids (steroid burst) Immunotherapy (selected cases)
SEVERE	Daily Steroids (perferably by aerosol) Daily Beta Agonist Daily Inhaled Cromolyn Daily Theophylline Immunotherapy (selected cases)

Acknowledgements

Appeciation is expressed to Carol R. Angle, M.D. for reviewing the manuscript and to Ginny Grawet for secretarial assistance.

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Transplacentally Acquired Digitoxin Induced Bradycardia in a Neonate

JEFF C. VAN GUNDY, M.D.
DAVID L. BOLAM, M.D.*
SCOTT A. SWIGART, PHARM. D.
ROBERT M. NELSON JR., M.D.
Department of Pediatrics, University of Nebraska Medical Center

THIS is a case report of a term infant who developed cardiac arrythmia secondary to intrauterine transplacentally acquired digitoxin at therapeutic levels. Multiple bradyarrythmias were encountered in the infant that could only be attributed to digitoxin effect.

Case report: the patient is a 2.5 kilogram (appropriate for gestational age) 36 week gestation male infant born to a 23 year old gravida II para II mother, who was transferred to the University of Nebraska Medical Center by air transport with a history of three pillow orthopnea and pedal edema. The mother had a history of Tetrology of Fallot corrected ten years prior to this pregnancy. She was on digitoxin (.05 mg per day), diazide, and mandelamine at the time of delivery. Prior to delivery, the fetal heart rate was 150 bpm. The delivery occurred 30 minutes after maternal arrival at our institution and was controlled but precipitous. Apgar scores were 5 at one minute (2 off for color, 1 off for tone, 1 off for respirations, and 1 off for grimace) and 9 at five minutes (one off for color). Eight hours after delivery, the infant was noted to have periodic bradycardia lasting up to 30 seconds with the heart rate dropping to 75 bpm. The patient was taken to the Neonatal Intensive Care Unit from the normal nursery and evaluated for sepsis and metabolic causes of bradycardia. This evaluation included CSF and blood cultures, CBC, electrolytes, calcium, and glucose. All were within normal limits. Except for the previously described brief periods of bradycardia, vital signs were stable. Cardiac evaluation was also undertaken and included chest radiograph and electrocardiogram. The electrocardiogram showed nonspecific ST segment depression and "scooping" in the V1 to V4 precordial leads with a normal corrected QT interval. The chest x-ray was within normal limits, including heart size and pulmonary vascular markings.

The clinical course of the baby was complicated by frequent periods of sinus bradycardia with 75 bpm the lowest recorded episode. These episodes occurred 18 times during the first day of life, then diminished in frequency on the second and third days to an average of 12 episodes per day. All of the episodes resolved with stimulation. No atropine or other vagal blocking agents were used. The bradycardia episodes disappeared over the next 5 days.

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*Reprint Requests to: David L. Bolam, M.D., Department of Pediatrics, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105.

Due to the maternal medication history, digitoxin levels were measured on samples of the infant's and mother's serum. The levels were analyzed by radioimmunoassay, (see Table I).

Pharmacokinetic evaluation showed the half-life to be 120 hours. Extrapolation of the values in Table 1 gave a serum level at birth of 8.7 ng/ml.[1, 2] This is within our laboratory's therapeutic range for digitoxin.

Discussion

The disposition kinetics (metabolism/clearance) of digitoxin have not been as thoroughly examined as digoxin. It is known that both cross the placenta.[3-9] Digoxin will more rapidly cross than digitoxin.[8] Studies comparing the serum concentration of digitoxin to fetal and maternal levels were found to be dependent on length of gestation and chronicity of drug ingestion.[4] The fetus near term has similar serum levels to maternal levels.[8] Tissue concentrations are reported to be considerably lower in the fetus.[3, 8] The highest concentrations are found in the myocardium.[8] Digoxin has been used to treat fetal tachycardia and congestive failure **in utero** by maternal administration.[9, 10] Fetal toxicity resulting in neonatal death has been reported with maternal overdose.[11] Otherwise fetal toxicity has not been reported. No cases of fetal toxicity have been reported for "therapeutic levels" of digitoxin.

Table I.
Digitoxin Serum Level (ng/ml)

Infant Age	Maternal level	Infant level
36 hrs	7.0	—
64 hrs	—	6.0
135 hrs	—	4.0

Digitoxin is highly protein bound with most studies reporting greater than 90% binding as compared to between 10-40% for digoxin. Metabolites are also protein bond. Several studies suggest that low serum concentrations of albumin could free more digitoxin for tissue binding and/or excretion.[12, 15] The plasma albumin bound digitoxin is inactive. In order to achieve therapeutic levels, higher serum concentrations of digitoxin are required. Since unconjugated bilirubin is nearly insoluble in serum water and is transported in plasma primarily bound to albumin, elevated unconjugated bilirubin may explain why the fetal extrapolated digitoxin level in our patient was higher than the simultaneous maternal level. This may also explain why our patient did not become symptomatic until 8 hours of age.

More data is available on digoxin and its tolerance in the newborn infant. Full term newborn infants with cardiac disorders are known to require much higher doses than adults.[14] The treatment of intrauterine supraventricular tachycardia with maternal digoxin has been done with successful intrauterine cardioversion.[9, 10] In order to achieve adequate fetal levels of digoxin, higher maternal dosages of digoxin are required.[9] At this time no postnatal toxicity to digoxin from intrauterine therapy is known. There are no reported cases of use of digitoxin for cardioversion of intrauterine supraventricular tachycardia in the newborn.

Digitoxin is thought to be eliminated from the human largely through metabolic change to cardio-inactive breakdown products (30 to 50% is eliminated intact in urine and feces).[1, 13, 15] The half life of digitoxin ranges from 2 to 16 days. The difference in the elimination, the longer half life when compared to digoxin, along with the relatively narrow range between toxic and therapeutic dose, has made digitoxin the less favorable digitalis glycoside. The advantage of digitoxin therapy relates to its hepatic rather than renal clearance, which would be a benefit in situations when renal function is compromised.

Enterohepatic recycling of digitoxin in man is reported to be 6.6%.[1] This figure approximates that reported for digoxin. However, other studies suggest a much higher enterohepatic recycling rate.[13] The enterohepatic recycling of digoxin and digitoxin may have significant importance in the neonatal patient who has physiologically altered bile clearance and increased enterohepatic circulation.

The electrocardiographic changes seen with digitalis glycosides are shortened QT intervals, sagging or depression of the ST segment, and flattening or inversion of the T waves. Digitalis glycoside excess may result in almost any of the known cardiac dysrhythmias.[16] The changes seen in our infant are consistent with digitoxin effect.

Summary

This report presents a term infant who had postnatal bradycardia unexplained by any causes other than "therapeutic" levels of digitoxin. Digitoxin may not be a desirable cardiac glycoside to use for maternal indications during pregnancy. This case report describes a potentially harmful side effect to the neonate after birth due to maternally acquired digitoxin.

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FRACTURE OF THE MONTH

Delayed Thoracic Outlet Syndrome from Clavicular Non-Union: Management by Morseling

JOHN F. CONNOLLY, M.D.
ROBERT DEHNE, M.D.
From the combined programs in Orthopaedic Surgery, University of Nebraska Medical Center, Creighton University, Omaha Veterans Administration Hospital, 42nd and Dewey Avenue, Omaha, NE 68105-1065.

DESPITE the fact that one of every 20 fractures occurs in the clavicle, complications are rare.[1] For example, the highest reported incidence of non-union is 1.9%.[2] The clavicle is usually effective in protecting the underlying neurovascular structures from direct trauma. However, delayed neurovascular complications can occur after clavicular fracture and pass unrecognized for many months or even years.[3-4] This patient is presented as an example of such a diagnostic and treatment problem.

Case Report

The patient was a 30-year old man who presented with a two-year history of swelling, weakness, color changes, and pins and needles sensation in the ulnar distribution of the right arm. These symptoms had increased over the previous six months. Five years previously, he had sustained a right clavicle fracture in a motorcycle accident, as well as multiple other fractures. The clavicle was treated at that time with a figure-eight harness. On physical examination in our clinic, a 4 x 5 cm mass was palpable in the middle third of the right clavicle. This was painful with direct pressure, as well as with motion of the shoulder. The patient's right hand was slightly edematous and plethoric and elevation of the hand produced pins and needles sensation down the arm. An electromyogram and arteriogram were

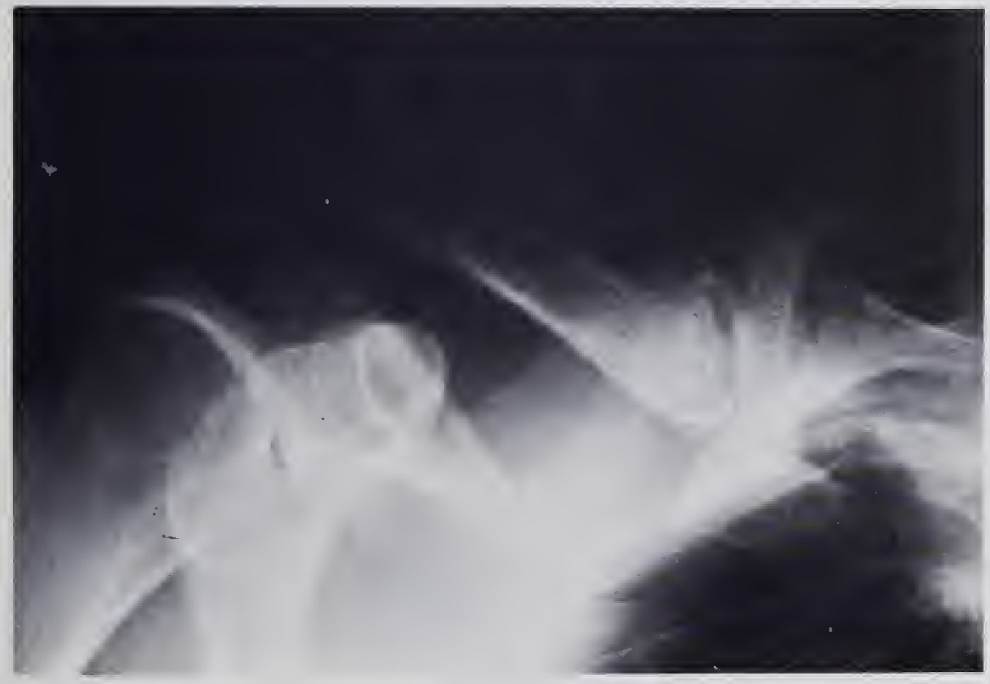

FIGURE 1
X-ray at the time of initial presentation demonstrates the hypertrophic non-union of the clavicle which was impinging on subclavicular neurovascular structures.

performed and interpreted as normal. However, a venogram showed a filling defect in the subclavian vein at the level of the hypertrophic callus (Fig. 1).

Discussion

The clavicle fracture has the reputation of being a benign injury that always heals. Treatment of these fractures with "off-the-shelf" products reflects this attitude. The principles of adequate reduction and immobilization can thereby be violated, particularly when the clavicle fracture is associated with other injuries. X-rays (Fig. 2) usually show the lateral fragment is pulled down by the weight of the shoulder, while the medial fragment is elevated by the sternocleidomastoid muscle.[5]

In the child with fast healing and excellent remodeling potential, the figure-eight harness provides adequate support and comfort. However, the adult immobilized with this device is likely to experience persistent pain. Also, fracture healing can be impeded by the motion of the clavicle and the harness may actually distract the fracture if the straps are allowed to drift laterally. Immobilization in a clavicular shoulder spica cast with the shoulder extended and elevated provides a more effective method of closed fracture support and symptomatic relief.[1,5] However, six weeks immobilization in this cast may be difficult, particularly for patients who have multiple injuries. Under such circumstances open reduction and internal fixation may be indicated.[6]

Delayed neurovascular compression results from progressive narrowing of the space between the clavicle and the first rib due to inferior and posterior displacement of a malunion with hypertrophic callus. Intermittent compression characteristically occurs as the arm is flexed forward, the shoulder is depressed, or the head is turned. Characteristically, these symptoms may be ignored or not recognized as resulting from the clavicular fracture.

Resecting the offending portion of the clavicle can remove the site of compression. However, the lateral third of the clavicle frequently regenerates and produces recurrent symptoms or impingement on the neurovascular structures. Therefore, we feel that the mid-third of the clavicle should not be merely resected; rather it should be replaced by refilling of the defect with fragments morselized from the resected callus.[7] This permits decompression of the neurovascular structures but provides for subsequent regeneration of the clavicle.

Management

The patient was taken to the operating room and the hypertrophic middle third of the

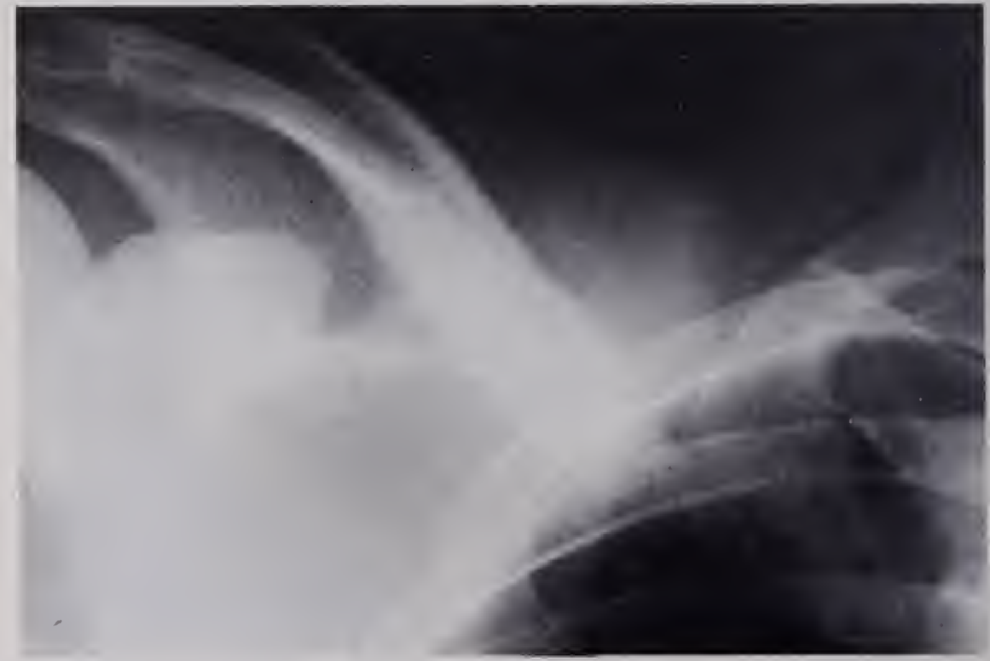

FIGURE 2

The initial x-rays 5 years prior to this presentation showed the typical displacement of the midclavicular fracture which was not reduced adequately by a figure-eight harness.

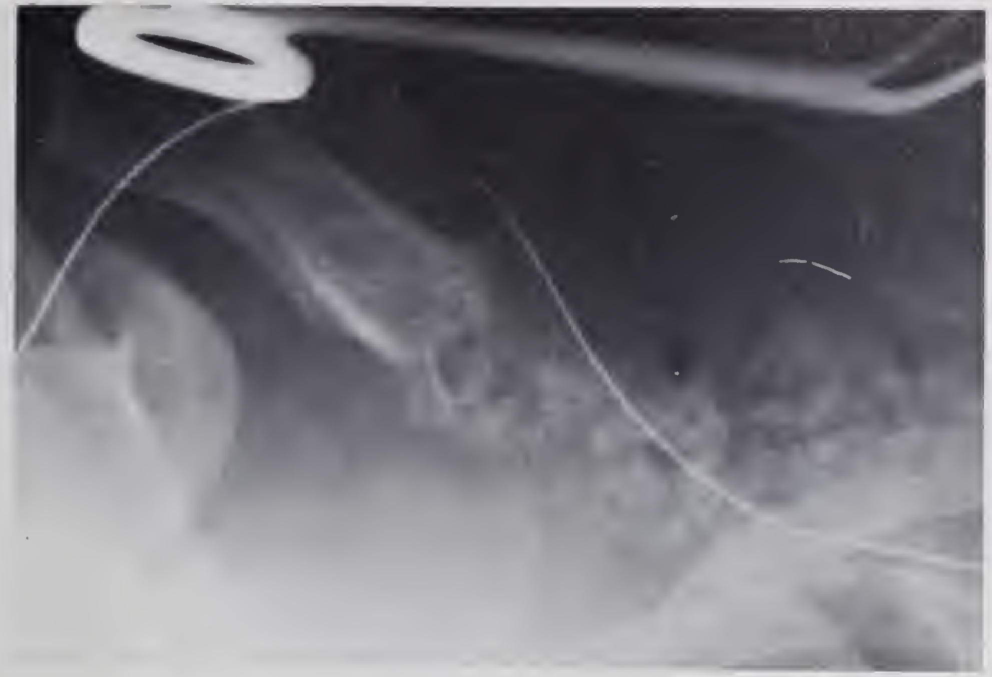

FIGURE 3
Postoperative x-ray demonstrates resected hypertrophic non-union, which was replaced by bits and pieces of callus laid into the periosteal bed.

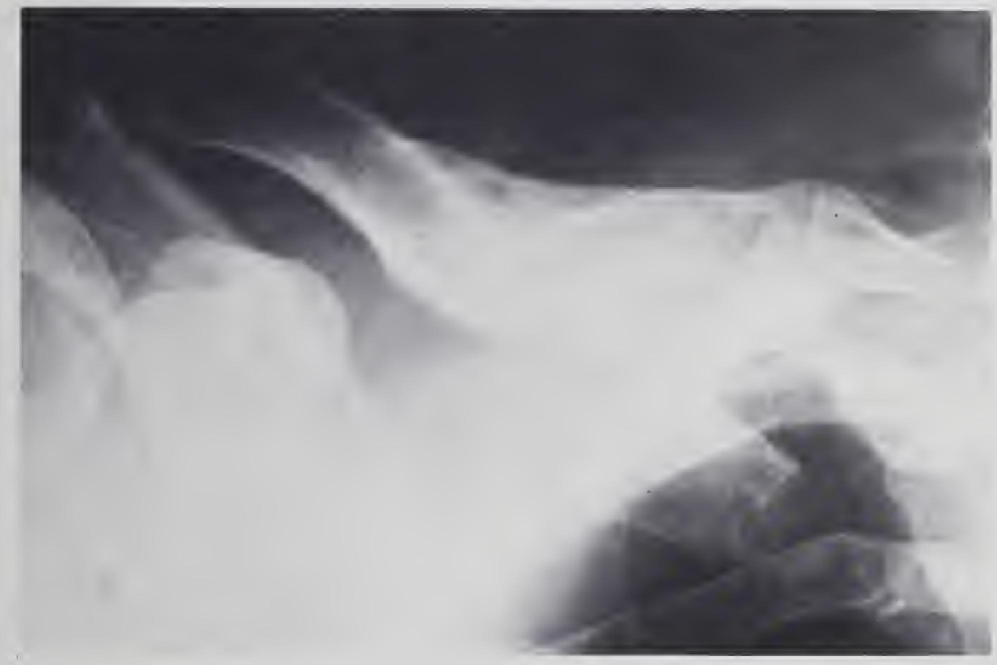

FIGURE 4
X-ray at 18 months after operation showed a well-healed clavicle with incorporation of bone pieces. The patient's shoulder and arm pain have been relieved.

clavicle was resected, care being taken to protect the underlying neurovascular structures. The resected callus was rongeured into multiple small fragments, and these chips were then placed back into the periosteal bed. (Fig. 3) The patient was immobilized post-operatively in a shoulder spica cast for one month and then with a sling for an additional four weeks. On follow-up 18 months after the surgical procedure the patient was symptom-free. His range of motion and strength on the injured side were equal to the opposite side. His clavicle was no longer tender or prominent, and x-rays showed a well-healed grafted segment in the middle third. (Fig. 4) The patient was satisfied with the relief of his arm and shoulder symptoms.

Conclusions

Although clavicle fractures are relatively benign in children, complications in adults can be significant. Adults require more than "off-the-shelf" treatment, and closed treatment may not always be the most prudent in certain situations. Careful consideration of the possibility of damage to underlying neurovascular structures is important in managing both the acutely injured patient, as well as the patient with thoracic outlet symptoms many years after the original fracture.

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President's Page

PARTICIPATION IN ORGANIZED MEDICINE

The members of the NMA are all supporters of organized medicine in some degree. The level of participation varies according to the desire of the physician and sometimes due to other demands on their time and resources. The avenues are open and everyone has ample opportunities to express their opinion and get their views evaluated. I have heard it stated that "anyone worth their salt" is a liberal during their younger years and becomes more conservative as time goes by. Whether this is always true, I don't know, but if we are to show progress, we must carefully evaluate the opinion of all our members. If attendance and participation at the various levels of meetings is not possible, representation through your delegates, or preparing and submitting a resolution can accomplish the same pur-pose through our democratic process.

We are having an increasing number of medical students and residents joining our organization during their training years. Unfortunately, we have a relatively low percentage of the young physicians in their early years of practice as members of the medical society at local, state or national levels. The House of Delegates did instruct the Board of Directors, at our recent annual meeting, to consider establishment of a Young Physician Commission at the state level. Also at the national level, the House of Delegates established a new Young Physician Section with a voting delegate. The A.M.A. will assist state medical associations in establishing similar sections. These efforts should strengthen the active involvement and membership of young physicians in organ-ized medicine and assure them of the input they need.

Hiram R. Walker, M.D.

It was very impressive and truly an educational experience to attend the reference committee meetings and hear the comments and debates on the various resolutions and committee reports by the members at the recent A.M.A. meeting. Invariably, the common interest and the bottom-line was what was best for our patients and for the physician-patient relationship. We are very fortunate to have the many able and dedicated people who are willing to give of their time and efforts to protect and further the interests of all physicians in providing quality health care for our patients.

The transition in medicine is seeing a swing away from the "traditional, solo, fee for service" to many alternative forms of practice. There are now many well trained physicians who are salaried em-ployees of health maintenance organizations, hospitals, or even "Doc in the Box" operations in shopping centers. Regardless of the method of the delivery of health care, the common interest of all physicians is still how to best serve their patient.

We need the participation and input of all physicians if we are to continue to attract members, remain unified and con-tinue to build our chosen profession of which we are so proud.

Hiram R. Walker, M.D.
President

The Auxiliary

AMA AUXILIARY NATIONAL CONVENTION 1986

The sixty-third annual session of the American Medical Association Auxiliary was held June 15-18 at the Drake Hotel, Chicago, Illinois. Nebraska delegates attending were Ardis Grace, Bev Kruger, Colleen Adam and Helen Krause.

The convention opened on Sunday, June 15, with National Program Previews, presented by Program Committee Chairmen, and with an address by John Thompson on "Marketing Membership." Mr. Thompson is President of Loucks, Thompson, Starling, and Associates, Inc., and a faculty member of Texas Christian University. Mini-briefing sessions followed with presentations on AMA-ERF, Health Projects, Legislation and Membership.

Our President, Mary Kay McPhee, attended the opening of the AMA House of Delegates at the Chicago Downtown Marriott Hotel and presented the Auxiliary contribution of over $2 million for AMA-ERF. This represented a substantial increase over last year.

At the 5 o'clock opening of the AMA Auxiliary House of Delegates in the Grand Ballroom of the Drake, all State Presidents were presented. After the state roll call of delegates, the Speaker of the House, Betty Drew, introduced the resolutions.

The Keynote Address was presented by the Honorable Maureen Reagan. She spoke on women's involvement in our nation's activities. A reception honoring Mary Kay McPhee and Pat Durham, President-elect, followed the address.

Reference Committee hearings were held following the AMPAC breakfast on Monday morning. Delegates heard proposed amendments to the Bylaws, and resolution reviews on health issues and organizational affairs.

Rowland Evans and Robert Novak, syndicated columnists, were guest speakers at the noon luncheon honoring AMA Auxiliary Past Presidents and Honorary Members.

During the afternoon session, Billie Brady presented the report of the 1986 Nominating Committee. Elected officers were: President, Pat Durham, Texas; President-Elect, Betty Szewczyk, Illinois, Eastern Regional V.P., Belle Tanenhaus, New York; North Central Regional V.P., Jean Cavanaugh, Kansas; Southern Regional V.P., Jean Hill, Mississippi; Western Regional V.P., Norma Skoglund, Oregon; Secretary, Mary Strauss, Maryland; and Treasurer, Virginia Kutait, Arkansas. Directors elected were: East, Velma Seif, Virginia and Joyce West, Pennsylvania; North Central, Diane Hinderliter, Illinois and Marie Hovland, South Dakota; South, Anne Pitchford, Texas and Sheila Davis, South Carolina; West, Mary Randolph, Washington and Peg Gobar, California.

State reports and Membership Awards were presented following the election of officers as well as on Tuesday morning.

State Caucuses to discuss Reference Committee reports and candidates for the Nominating Committee were held at 7:30 a.m. on Tuesday. The general meeting of the House of Delegates opened at 8:30 a.m. with voting on proposed amendments and resolutions. The proposed amendment to the Bylaws passed, resulting in the elimination of the positions of Speaker and Vice Speaker of the House of Delegates. With this amendment, the President of the AMA Auxiliary shall once again become the presiding officer at all sessions of the House of Delegates, going into effect at the close of the 1986 Annual Session.

The following Health Issue resolutions were passed: 1.) Education on Danger of Smokeless Tobacco Products; 2.) Education on and Prevention of Severe Injuries Due to Shaking a Child; 3.) Education on Reducing Risks of Osteoporosis; 4.) Education on the Prevention of Skin Cancer; 5.) Promotion of and Involvement with the Healthy Mothers, Healthy Babies Coalition; 6.) Requiring Comprehensive Health Education Program (including the subject of tobacco) in Elementary and Secondary Schools; and 7.) Banning of or Health

Warnings on Billboard Advertisements of Smokeless Tobacco Products.

Dr. Timothy Johnson, Lecturer at Harvard Medical School, and Medical Editor, ABC News and Entertainment, was the guest luncheon speaker on Tuesday. His talk focused on Communication and its role in the Liability Crisis.

Afternoon voting for the Nominating Committee resulted in the following being elected: Mary Kay McPhee and Barbara Quickstad from the Board of Directors; Bernie Maloney and Cecil Keshishian, East; Judy Koontz, North Central; Ann Hubbard, Southern; and Nancy Evans, Western.

Harrison L. Rogers, M.D., President of the AMA, spoke on Wednesday morning and thanked the Auxiliary for their efforts and support. He also highlighted a new system for paying for Medicare being introduced by the AMA.

Marjorie Robertson, National Past President, 1970-71, installed the new officers and Mary Kay McPhee presented the President's pin and gavel to Pat Durham. Following Mrs. Durham's inaugural address, the Annual Session was adjourned and a buffet luncheon was held honoring the new President.

The Nebraska delegates were grateful for the opportunity to represent our state and to serve in this challenging capacity.

Colleen Adam
President-Elect
NMA Auxiliary

In Memoriam

By medicine life may be prolong'd
yet death
Will seize the doctor too.

—Shakespeare

Robert H. McIntire, M.D. — (Born September 10, 1920 - died May 2, 1986) — Medical Specialty - Pediatrics. Doctor McIntire was a graduate of the University of Nebraska College of Medicine in 1948 and practiced in Hastings, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors are his wife, Maryilyn, one son, Dr. Robert H. McIntire, Jr., of Elkhorn; one daughter, Mrs. Kevin (Jacqueline) Rhodes of Lincoln; and five grandchildren.

Roland F. Mueller, M.D. — (Born August 29, 1905 - died May 29, 1986) — Medical Specialty - Surgery. Doctor Mueller was a graduate of Washington University School of Medicine in St. Louis, Missouri in 1929 and began practice in Lincoln in 1947. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Norma G., and daughters, Mrs. Robert (Nancy) Pecha of Kirkwood, MO, Mrs. Roger (Judith) Hall of Missouri City, Texas, and Doctor Kathryn Mueller of Chicago.

George N. Johnson, M.D. — (Born September 18, 1917 - died May 17, 1986) — Medical Specialty - General Surgery. Doctor Johnson was a graduate of the University of Nebraska College of Medicine in 1938 and practiced in Omaha, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Doctor Johnson is survived by his wife, Marie; daughter, Barbara Shipley of Steamboat Springs, CO; sons, Greg of Omaha, and Dr. G. Nick of San Francisco; his mother, Mary Johnson; and brother, Dr. Richard Johnson, both of Omaha; and three grandchildren.

University of Nebraska Medical Center News:

RURAL AREA PHYSICIANS FACE DIFFERENT TYPES OF DECISIONS AND DILEMMAS WHEN COMPARED WITH URBAN DOCTORS

While all physicians face the same basic ethical issues, doctors in rural areas confront different types of decisions and dilemmas when compared with urban doctors.

That's the basic conclusion of a study conducted by ethicists and students at the University of Nebraska Medical Center.

Dr. Ruth Purtilo said the basic issues of patient confidentiality, moral responsibility, improving quality of life and adequate health care resources may take on different meanings for rural physicians.

"While there may not be completely unique ethical issues in rural practice, we found that the course of action chosen as morally justifiable by the rural practitioner was significantly influenced by their practice setting," said Dr. Purtilo, chairman of the Medical Center's department of medical jurisprudence and humanities.

In coming to such a conclusion, Dr. Purtilo and her research assistants interviewed more than 20 physicians in 17 rural Nebraska communities, each of whose hospitals had no more than 100 beds.

"Several of the physicians who repsonded said that their situations forced them to 'march to the beat of a different drummer' than their counterparts in urban areas," she said.

A major difference for rural physicians is the interdependence between their personal and professional lives, said Dr. Purtilo. While it is more common for urban doctors to disassociate their personal lives from their professional practice, the distinction is not as clear for rural physicians.

"Everybody knows everybody here' was the familiar phrase among the physicians in the study," said Dr. Purtilo.

As a result, issues like patient confidentiality become as personal as they are professional for the rural physician. Dr. Purtilo cited cases in which patients in rural areas requested that their family doctor withhold embarrassing or highly personal information from their medical records for fear of close friends or relatives becoming aware of the information. Such fear is well established when friends and relatives may work in the town hospital or county health department and have access to such medical records.

"Anonymity for a patient cannot be assured in a situation where almost everybody around the patient is a relative, friend or foe," said Dr. Purtilo.

Thus physicians sometimes must be innovative in finding other means of recording the information without inadvertently making it available to persons who should not be privy to the information.

"Such courses of action to protect the patient's privacy would not be necessary and would probably be frowned upon in a large metropolitan area," she said.

The economic realities of small town medical practice is another major influence on a rural physician's treatment of patients. With many small town hospitals facing financial problems, there is more pressure on physicians to admit patients who can guarantee payment of their bills. Such patients, however, are becoming fewer in areas hit hard by the declining farm economy.

When acutely ill patients who do not have health coverage need medical attention, physicians are torn between making sure the patient has adequate treatment and ensuring that the survival of the hospital itself is not unduly threatened by the increasing numbers of such persons.

"Professional and personal roles being closely intermingled creates a situation in which the physician is expected to respond to the patient's needs, while also serving as a crucial protector of the best interests of the community," she said.

In her study, Dr. Purtilo found that most rural physicians who find themselves in such a dilemma follow the "ethos" of their rural community, which generally encourages supporting those individuals who are less fortunate or who have no resources.

"Failure to support such individuals is not only looked upon by the general community as unfitting for a physician, but also as irresponsible behavior as a citizen," said Dr. Purtilo "Such pressure supports the decision of the physician to act in favor of the patients, regardless of what the health care system dictates."

The economic issues, coupled with Nebraska's geography, also play a role in physician referral. Cases were cited in Dr. Purtilo's study showing that the patient's health care needs must be tempered with the patient's economic situation and willingnesss to be far from home in deciding on a course of treatment.

With the nearest appropriate referral hospital often being 80 to 100 miles from a rural community, many physicians feel that consideration must be given to the farmer or agribusinessman who feels he or she cannot be that far from the business for a lengthy period of time.

"Usually rural practitioners view themselves as being at a disadvantage because of a lack of readily available services in certain clinical situations," Dr. Purtilo said.

The problem of distance between health care facilities may be diminishing however, as more specialists begin practice in Greater Nebraska and as more communities work to solve their own health care inadequacies.

Regardless of what the future brings, Dr. Purtilo said it was clear that the quality of care provided by the physicians in the study was excellent and that the foremost concern by the physicians was the welfare of the patient.

"The rural physician's 'drummer' may be providing the direction that will help assure future success of health care in all settings," she said.

Welcome New Members

James B. VanDelden, M.D.
IHS Hospital
Winnebago, NE 68071

Steven S. Mahnke, M.D.
2510 - 18th Ave.
Central City, NE 68826

Robert A. McLellan, M.D.
805 W. Court
Beatrice, NE 68310

Mardelle M. Buss, M.D.
515 South 26th
Omaha, NE 68105

John J. Esslinger, M.D.
8301 Dodge St.
Omaha, NE 68114

Mary Lou Flearl, M.D.
12808 Augusta Ave.
Omaha, NE 68155

Juliann R. Krzemien, M.D.
P.O. Box 2118
Grand Island, NE 68803

Coming Meetings

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE—ALPHA OMEGA ALPHA — Joint Meeting of Executive Committee and Committee Chairmen — Wednesday, August 6, 1986, 4:00 p.m., 5025 Wittson Hall, UNMC Campus, Omaha.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — JOHN S. LATTA CENTENNIAL LECTURESHIP — August 28-29, 1986, UN Medical Center, Omaha, Nebr. Speaker - D. Brynmor Thomas, M.B., B.S., D.Sc., FRS (Edin), Bute Professor and Head of the Dept. of Anatomy and Experimental Pathology, University of St. Andrews, Scotland. Thursday, August 28, 12 noon - Latta Lecture: "OUR INTERFACE WITH THE ENVIRONMENT" - Wittson Hall Ampitheatre, UNMC. Friday, August 29, 12 noon - Medical Grand Rounds: "HEPATIC HAEMATOPOIESIS" - Bishop Clarkson Hospital, Storz Pavilion, Omaha, Nebr. Everyone invited.

ADVANCED TRAUMA LIFE SUPPORT — September 15-16, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

EMERGENCY MEDICINE REVIEW— September 22-27, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Cocktail Reception - Tuesday, September 30, 1986, 5:30 to 7:00 p.m. - Washington Hilton Hotel, Washington, D.C. - in conjunction with the American Academy of Family Physicians meeting. All alumni, spouses and friends are invited. Hors D'oeurves and Cash Bar.

EMERGENCY MEDICINE REVIEW— October 6-11, 1986, University of Nebraska Medical Center, Center for Continuing Education. A comprehensive update on Emergency Medicine with "mini" board exams each day. (45 credit hours)

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Roundup and Reception in Omaha, Monday, October 27, 1986, 6:00 - 7:30 p.m., Red Lion Inn Ballroom; in conjunction with the Omaha Mid-West Clinical Society Postgraduate Assembly. Hors D'oeuvres and Cash Bar. All alumni, spouses, faculty and friends are cordially invited. Followed at 7:45 p.m. with a 50-year Dinner, Nebraska Room, Red Lion Inn. Class reunions will be held in Omaha in late October for classes ending in "6" and "1".

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

NEBRASKA METHODIST HOSPITAL

ANNUAL HOWARD B. HUNT CANCER SEMINAR: ENVIRONMENT AND CANCER, UPDATE ON AIDS, LASER THERAPY FOR CANCER — October 10, 1986 - all day seminar - Nebraska Methodist Hospital - 8303 Dodge Street - Omaha, Nebraska 68114 - No registration fee - For further information call - 402-390-4035.

LANCASTER COUNTY MEDICAL SOCIETY

"CLINICAL UPDATE - II—November 8, 1986 (Saturday), Villager Convention Center, 5200 "O" St. - Lincoln, NE. This "Clinical Update - II" will be a continuing medical education program designed to address and update the care of patient health care problems presenting in primary care M.D. offices on a day-to-day basis. It is anticipated that the program will be reviewed and accepted for 6 prescribed hours by the American Academy of Family Practice. As an organization accredited for continuing medical education, the medical education committee - Lancaster County Medical Society designates this continuing medical education activity as meeting the criteria for 6 credit hours in category I of the Physicians Recognition Award of the American Medical Association. Contact: P. D. Duensing, Ed.D. - Executive Secretary, Lancaster County Medical Society, (402) 474-2405.

CREIGHTON UNIVERSITY

FAMILY MEDICINE UPDATE — August 29-30. The Lodge at Okoboji, Okoboji, Iowa — Fee TBA. 10 Hours.

FINE NEEDLE ASPIRATION BIOPSY — Sept. 6. Holiday Inn Central, Omaha, Nebraska — Fee $75.00. 3 Hours.

CARDIOLOGY/RHEUMATOLOGY UPDATE — Sept. 18-30. Ireland Study/Tour in cooperation with Trinity College and University College: Co-sponsored with University of Wisconsin and Tulane Medical Center — Fee $400. 36 Hours.

A DAY WITH THE PERINATOLOGISTS — Sept. 20. Marriott Hotel, Omaha, Nebraska — 7 Hours. Fee: $100.00.

MEDICINE IN THE NINTIES — Oct. 11-17. U.S. Grant Hotel, San Diego, California — Fee TBA. Hours TBA.

OMAHA MID-WEST CLINICAL SOCIETY — Oct. 27-29. Red Lion Inn, Omaha, Nebraska — Fee $160. 23 Hours.

1987

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17. Wyndiam Rose Hall Hotel, Montego Bay, Jamaica — Fee TBA. Hours TBA.

CORONARY HEART DISEASE AND HYPERTENSION — Feb. 1-6, Freeport, Bahamas, Hours TBA. Fee TBA.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICINE AND RELIGION: ETHICS OF SEXUALITY AND REPRODUCTION — October 21-22, 1986. Sponsored by the University of Kansas Medical Center. Location Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas 66103. Credit: AMA Cat 1, AAFP, SW, CNE. Contact: Carole Rosen, University of Kansas Medical

Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480

EMERGENCY RESPIRATORY CARE — October 24-25, 1986. Sponsored by the University of Kansas Medical Center. Location: Doubletree Hotel, Overland Park, KS. Credit: AMA Cat 1, CME, AART, CRNA, CNE, MICT, PT. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

AMERICAN CANCER SOCIETY: PEDIATRIC ONCOLOGY SYMPOSIUM — October 17, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103 and the American Cancer Society - Kansas Division, Inc. Credit: AMA Cat 1, AAFP, CNE, SW, PT. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

SCHEDULED MEETINGS

54TH ANNUAL POSTGRADUATE ASSEMBLY — Omaha Mid-West Clinical Society, October 27, 28 and 29, 1986 at The Red Lion Inn/Omaha. For information, please contact: Miss Lorraine E. Seibel, Executive Secretary, Omaha Mid-West Clinical Society, 7363 Pacific Street, #205-B, Omaha, Nebraska 68114.

fore prescribing, see complete prescribing information in SK&F CO. rature or *PDR*. The following is a brief summary.

WARNING

This drug is not indicated for initial therapy of edema or hypertension Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

ntraindications: Concomitant use with other potassium-sparing agents ch as spironolactone or amiloride Further use in anuria, progressive al or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum tassium. Hypersensitivity to either component or other sulfonamide-rived drugs.

arnings: Do not use **potassium supplements, dietary or otherwise, less hypokalemia develops or dietary intake of potassium is markedly paired**. If supplementary potassium is needed, potassium tablets ould not be used Hyperkalemia can occur, and has been associated th cardiac irregularities It is more likely in the severely ill, with urine lume less than one liter/day, the elderly and diabetics with suspected confirmed renal insufficiency. Periodically, serum K$^+$ levels should be termined. If hyperkalemia develops, substitute a thiazide alone, restrict intake **Associated widened QRS complex or arrhythmia requires ompt additional therapy**. Thiazides cross the placental barrier and pear in cord blood. Use in pregnancy requires weighing anticipated nefits against possible hazards, including fetal or neonatal jaundice, ombocytopenia, other adverse reactions seen in adults. Thiazides pear and triamterene may appear in breast milk. If their use is essential, patient should stop nursing Adequate information on use in children not available. Sensitivity reactions may occur in patients with or with- t a history of allergy or bronchial asthma. Possible exacerbation or tivation of systemic lupus erythematosus has been reported with azide diuretics.

ecautions: The bioavailability of the hydrochlorothiazide component of yazide' is about 50% of the bioavailability of the single entity eoretically, a patient transferred from the single entities of triamterene d hydrochlorothiazide may show an increase in blood pressure or fluid tention. Similarly, it is also possible that the lesser hydrochlorothiazide oavailability could lead to increased serum potassium levels. However, tensive clinical experience with 'Dyazide' suggests that these conditions ve not been commonly observed in clinical practice. Angiotensin-nverting enzyme (ACE) inhibitors can elevate serum potassium; use th caution with 'Dyazide' Do periodic serum electrolyte determinations articularly important in patients vomiting excessively or receiving renteral fluids, and during concurrent use with amphotericin B or rticosteroids or corticotropin [ACTH]). Periodic BUN and serum eatinine determinations should be made, especially in the elderly, abetics or those with suspected or confirmed renal insufficiency. mulative effects of the drug may develop in patients with impaired renal nction Thiazides should be used with caution in patients with impaired patic function. They can precipitate coma in patients with severe liver sease. Observe regularly for possible blood dyscrasias, liver damage, her idiosyncratic reactions. Blood dyscrasias have been reported in tients receiving triamterene, and leukopenia, thrombocytopenia, ranulocytosis, and aplastic and hemolytic anemia have been reported th thiazides. Thiazides may cause manifestation of latent diabetes ellitus. The effects of oral anticoagulants may be decreased when ed concurrently with hydrochlorothiazide; dosage adjustments may be cessary. Clinically insignificant reductions in arterial responsiveness norepinephrine have been reported. Thiazides have also been shown to crease the paralyzing effect of nondepolarizing muscle relaxants such tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic ood studies in cirrhotics with splenomegaly. Antihypertensive effects ay be enhanced in post-sympathectomy patients. Use cautiously in rgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' ould be used with caution in patients with histories of stone formation. few occurrences of acute renal failure have been reported in patients 'Dyazide' when treated with indomethacin. Therefore, caution is vised in administering nonsteroidal anti-inflammatory agents with yazide' The following may occur: transient elevated BUN or creatinine both, hyperglycemia and glycosuria (diabetic insulin requirements may altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), creasing alkali reserve with possible metabolic acidosis. 'Dyazide' terferes with fluorescent measurement of quinidine. Hypokalemia is common with 'Dyazide', but should it develop, corrective measures ould be taken such as potassium supplementation or increased dietary take of potassium-rich foods. Corrective measures should be instituted utiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated rum potassium. Chloride deficit may occur as well as dilutional ponatremia. Concurrent use with chlorpropamide may increase the risk severe hyponatremia. Serum PBI levels may decrease without signs thyroid disturbance. Calcium excretion is decreased by thiazides. yazide' should be withdrawn before conducting tests for parathyroid nction. Thiazides may add to or potentiate the action of other anti-pertensive drugs. Diuretics reduce renal clearance of lithium and crease the risk of lithium toxicity.

dverse Reactions: Muscle cramps, weakness, dizziness, headache, y mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other ermatological conditions; nausea and vomiting, diarrhea, constipation, ther gastrointestinal disturbances; postural hypotension (may be ggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, aresthesias, icterus, pancreatitis, xanthopsia and respiratory distress cluding pneumonitis and pulmonary edema, transient blurred vision, aladenitis, and vertigo have occurred with thiazides alone. Triamterene as been found in renal stones in association with other usual calculus omponents. Rare incidents of acute interstitial nephritis have been ported. Impotence has been reported in a few patients on 'Dyazide', lthough a causal relationship has not been established.

upplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 000 capsules; Single Unit Packages (unit-dose) of 100 (intended for stitutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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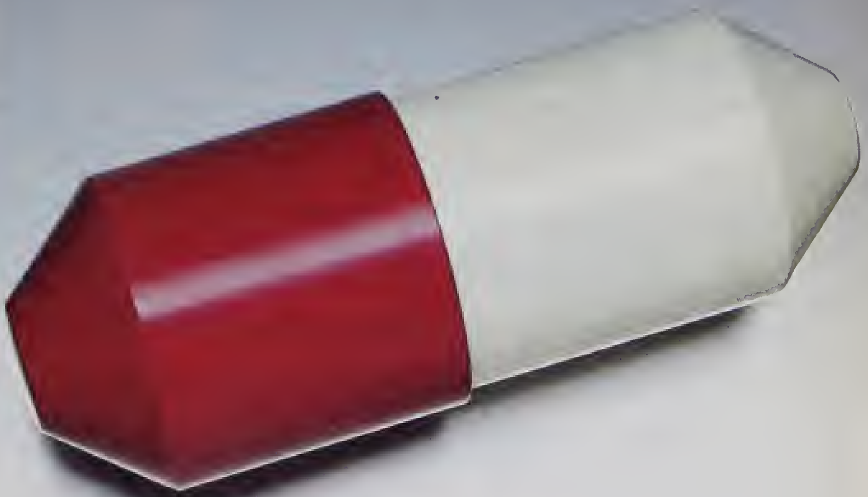

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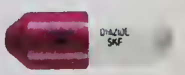

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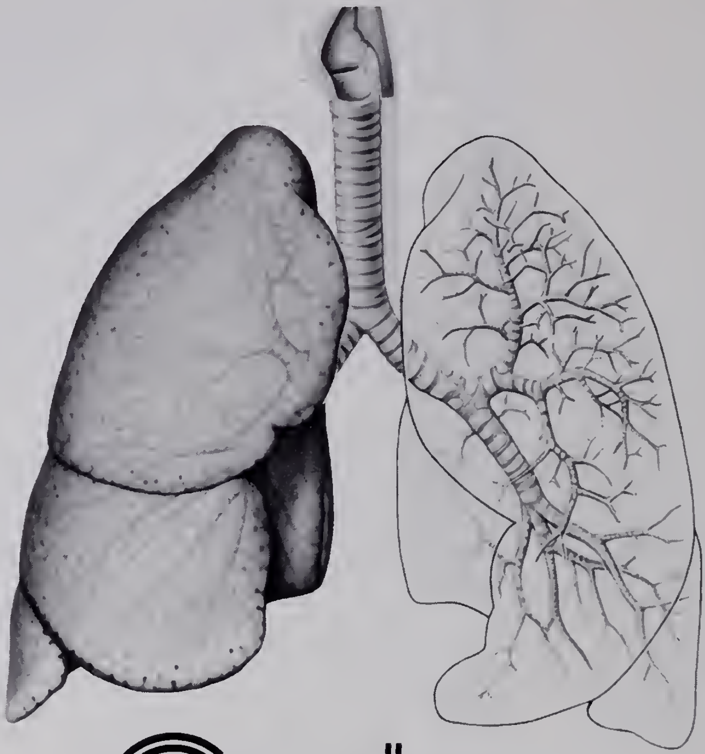

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Penicillin is the usual drug of choice in the treatment an prevention of streptococcal infections, including the prophylaxi of rheumatic fever. See prescribing information.

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Summary. Consult the package literature for prescribing information.

Indications: Lower respiratory infections, including pneumonia, caused by susceptible strains of *Streptococcus pneumoniae, Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Contraindications: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:
- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- In renal impairment, safe dosage of Ceclor may be lower than that usually recommended. Ceclor should be administered with caution in such patients.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:
- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, erythema multiforme, serum-sickness-like reactions): 1.5%; usually subside within a few days after cessation of therapy. These reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reporte half of which have occurred in patient with a history of penicillin allergy.
- Other: eosinophilia, 2%; genital pruritu or vaginitis, less than 1%.

Abnormalities in laboratory results uncertain etiology
- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocy count (especially in infants and childre
- Abnormal urinalysis; elevations in BU or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucos with Benedict's or Fehling's solution a Clinitest® tablets but not with Tes-Tape (glucose enzymatic test strip, Lilly)

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AMA News Notes

(Continued from page 12-A)

"There is no such thing any more as a best or even a better way to practice medicine," he said. There are perfectly competent physicians practicing in solo or small partnership offices and in shopping centers, as well. There are competent physicians who are salaried employees of hospitals or members of health maintenance organizations or preferred provider organizations. Competent MDs also can be found in large medical groups or in joint business ventures with hospitals, Dr. Rogers said.

All "are trying to learn how to take care of patients who are unable to pay for everything they need because their insurance is limited or because their government program has been cut back or simply because they do not have insurance," he said.

* * *

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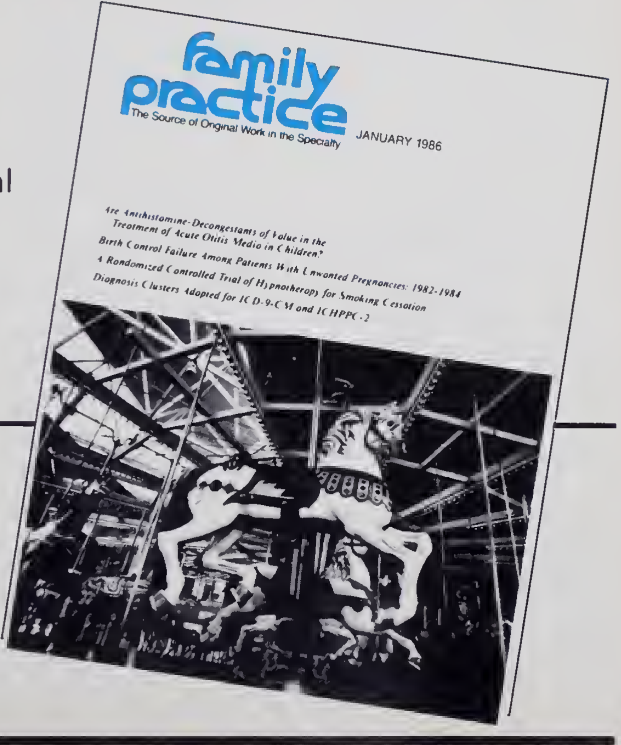

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Are Antihistamine-Decongestants of Value in the Treatment of Acute Otitis Media in Children?
Birth Control Failure Among Patients With Unwanted Pregnancies: 1982-1984
A Randomized Controlled Trial of Hypnotherapy for Smoking Cessation
Diagnosis Clusters Adopted for ICD-9-CM and ICHPPC-2

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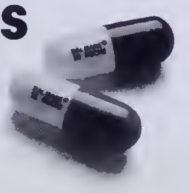

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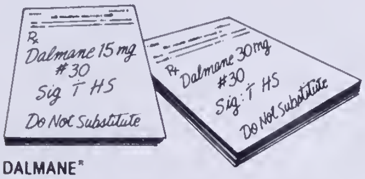

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118 Years

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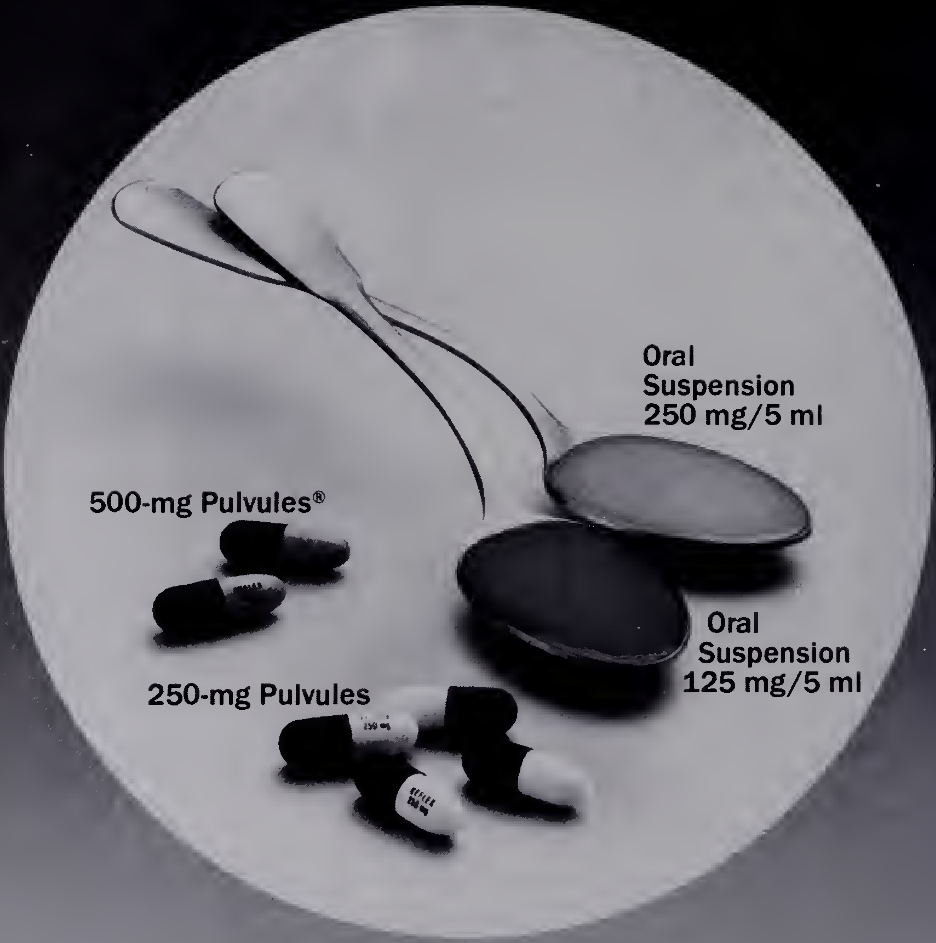

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Review articles will be considered, and should generally be limited to less than 4,000 words and approximately 30 references.

Manuscripts describing original clinical or laboratory research should be limited to 2,000 words and approximately 20 references.

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AMA News Notes

Calling on the Medical Profession to recommit itself to an ethic of viewing the patient as person, John J. Coury Jr., MD, was sworn in as the 141st president of the AMA.

In an inaugural address decrying society's increasing tendency to view individual human beings as "consumers," "beneficiaries," or "recipients," Dr. Coury, a Port Huron, Mich., general and pediatric surgeon, noted that "if people can be reduced to these impersonal terms, it becomes easier to reduce funding of social and health programs."

He said that the message he will carry across the nation in his year as president will be that the profession must maintain "its rightful position as a leader in making this nation's health policy," and that the profession must also "become more committed to taking forceful action against physicians who are 'sore spots' in our profession."

(Continued on page 346)

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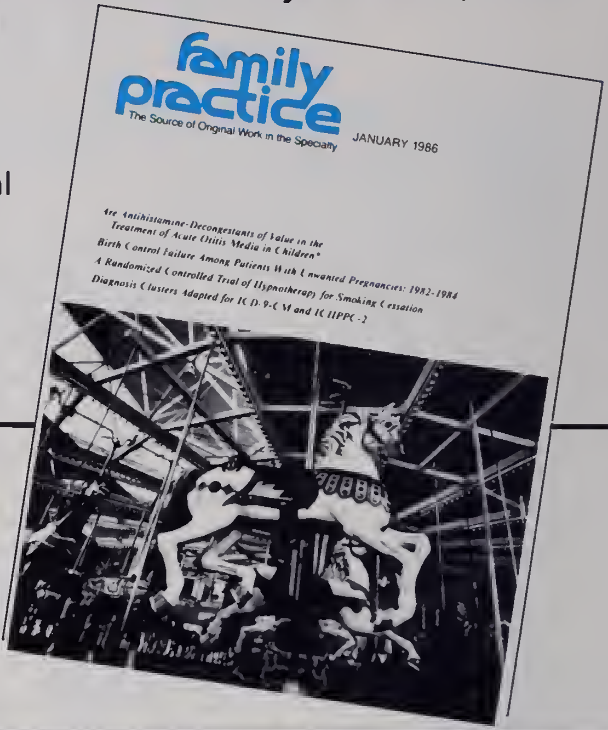

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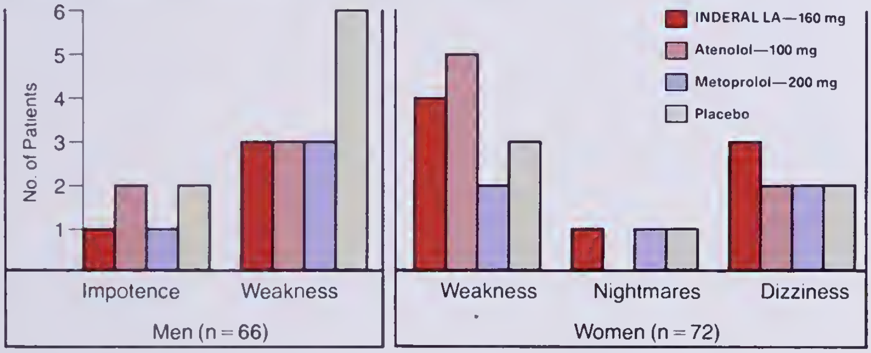

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CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in. 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs.

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible).

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function Propranolol is not indicated for the treatment of hypertensive emergencies

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that propranolol may interfere with the glaucoma screening test Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well-controlled studies in pregnant women Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS. Propranolol is excreted in human milk Caution should be exercised when propranolol is administered to a nursing mother.

PEDIATRIC USE: Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids Medication such as digitalis may also influence serum electrolytes Warning signs irrespective of cause are Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability) Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy.

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diabetes mellitus which has been latent may become manifest during thiazide administration

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen Thiazides should be discontinued before carrying out tests for parathyroid function

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY: Pregnancy Category C Thiazides cross the placental barrier and appear in cord blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus These hazards include fetal or neonata jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred n the adult

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE. Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular Bradycardia, congestive heart failure, intensification of AV block, hypotension, paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type

Central Nervous System. Lightheadedness, mental depression manifested by insomnia lassitude, weakness, fatigue, reversible mental depression progressing to catatonia visual disturbances; hallucinations, an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea constipation; mesenteric arterial thrombosis, ischemic colitis

Allergic: Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory Bronchospasm.

Hematologic Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous Alopecia; LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

Hydrochlorothiazide:

Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea constipation, jaundice (intrahepatic cholestatic jaundice); pancreatitis, sialadenitis

Central Nervous System Dizziness, vertigo, paresthesias, headache; xanthopsia

Hematologic Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol, barbiturates or narcotics).

Hypersensitivity Purpura, photosensitivity; rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions

Other Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness restlessness, transient blurred vision

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn

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REFERENCE:

1. Ravid M, Lang R, Jutrin I The relative antihypertensive potency of propranolol oxprenolol, atenolol, and metoprolol given once daily *Arch Intern Med* 1985,145 1321 1323

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THE NEBRASKA MEDICAL JOURNAL

Recruiting Medical Advisers in Emergency Care

DALE L. KEMMERER, M.D.
Grand Island

I believe every community needs and deserves at least one physician involved in emergency care and a basic life support unit (BLSU). I will outline the duties and responsibilities for a medical adviser and explain the advantages and compensation of this voluntary position. I addressed the Nebraska EMT Association in March of 1985 and encouraged them to recruit actively medical advisers and told them how they may effectively use them.

My present plea is for physicians to get involved in this vital area.

A Basic Life Support Unit is either a quick response team or an ambulance unit composed of emergency medical technicians (EMTAs). They are organized generally as volunteers but they may have some paid members. Our system evolved in the late 60's and 70's from an antiquated piecemeal system to the present comprehensive integrated system of the '80's. Under the aegis of the federal government and with tax dollar support, equipment, ambulances and communications systems were purchased. A huge cadre of volunteers was trained to respond to the emergencies in our communities. A network of councils was begun to integrate the units, one with another. There was an effort at that time to avoid physician opposition and, therefore, no definite role was spelled out for doctors. It was assumed and hoped, however, that physicians would take an active lead at the grassroots level.

Physicians have taken four basic attitudes toward this system. Some have been bold and become the initiators. They have been the shockers, the ones who got things moving. Others have been the mediators or negotiators, they oiled the wheels of progress. Also, there definitely have been a few who have been blockers. These generally were looking out for their own bailiwick. The majority, however, have been neglectors and, I confess that until 1975 I was a member of that group.

Is there a need for medical control? By law, only physicians may practice medicine. Society has invested heavily in physician training. We are therefore trusted with certain privileges. We uphold high ethical standards and high standards of competence which, in turn, society expects and deserves. EMTAs and quick response teams are not construed to be practicing medicine. They do see patients and treat them, sometimes for life threatening conditions and sometimes are even compensated financially. Therefore, I believe that EMTAs and quick response teams do practice medicine; its only a matter of semantics.

Now, how to reconcile the theory that only physicians can practice medicine, yet still allow EMTAs and quick response teams to do their jobs? The answer is: physician direction of BLSU.

The down side of this proposition is, if there is no medical control and high standards in conduct are not met, then society which gave us our emergency system and equipment may decide to take it away.

How does a BLSU operate? EMTAs graduate from an 81-hour course under the Department of Transportation. Continuing education is available under each of the six Nebraska Emergency Medicine Services (EMS) Councils organized throughout the state and with the direction of the State Department of Health. EMTAs are called to see patients often by a 911 system or through hospitals or law enforcement agencies. They have excellent equipment, supplies and vehicles and in general have an adequate radio communications system. However, they need direction, technical assistance and advise.

Regardless if the patient gets better or worse under their care, evaluation and review must still be made. This function has not been carried out well in our units. Retrospective function could be supervised by physicians. We are trained to look back on our experiences and profit by them. Self criticism is a foreign word sometimes for many EMTAs but it is at the root of what sets physicians apart from others. EMTAs need to look backwards. They also need to look to the present and the future. Knowing their weaknesses, they could initiate improved ways and procedures. For example, they could initiate an annual training program. They could plan for mass casualty incidents and mutual aid.

Medicine is working, I believe, towards a consensus or team approach not seen in other professions. A BLSU together with medical adviser is a potent team.

There are several other areas in which I think physicians may be of assistance. They can mediate from time to time with federal, state or local governments. They may secure the cooperation and understanding of other physicians, hospital staffs and the community in general. The physician, as a community leader, may lend his prestige to the benefits of the unit.

What qualification should the medical adviser have? He may be a generalist, a family physician, internist or surgeon, but there certainly are some fine specialists who have been interested and familiar with emergency medical training. Even though I have been using the word "he", I do definitely mean "she/he". Women are excellent medical advisers. He should be willing to give several hours a month to attend meetings and be on call for curbstone advise. He should complete two standard courses — Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS), which originated in Nebraska especially for physicians who infrequently treat major trauma.

What are the advantages to the position? I think first of all this is a lot of fun. It's a rewarding business. Second, it is a chance to lead and then to receive back the community's and patient's appreciation. Third, he can see that things get better; improvement is a fine reward. Fourth it is helpful in building a practice. Lastly, the physician can do those things that he was trained to do — to help his patients wherever they may be.

Cocaine: Current Clinical Use and Potential Abuse

GARY F. MOORE, M.D.
JANE M. EMANUEL, M.D.
FREDERIC P. OGREN, M.D.
ANTHONY J. YONKERS, M.D., F.A.C.S.

University of Nebraska Medical Center, Department of Otolaryngology and Maxillofacial Surgery, 42nd Street and Dewey Avenue, Omaha, Nebraska 68105-1065

History

COCAINE is a drug with a long and interesting medical history although most of its recent publicity has been focused on its illegal street abuse. Cocaine is an alkaloid which occurs naturally in the leaves of the erythroxylon coca plant in a concentration of approximately 1%. The plant grows almost exclusively in the Andes Mountains of South America, particularly in Peru and Bolivia. It grows only in an elevation of approximately 5000-6000 feet in a climate with no temperature extremes. It is an evergreen plant and can be harvested several times a year. Each plant produces for an average of 30-40 years. This plant is still the only known source of cocaine.[1]

Coca leaves have been chewed by the South American Indians since approximately the sixth century or earlier. Because of its numbing effects, bitter taste, and psychoactive action, the plant protects itself from animal usage and insect attack.

Cocaine was given special religious significance by the Inca Indians of South America. They used it as an offering to their gods and eventually restricted it only to members of their ruling class.

Coca leaves were probably brought to Europe by the Spanish conquerors. A Spanish physician, Nicholas Monardes, is generally given credit for the first publication on coca in 1596.[2] However, the coca plant did not arouse much interest until the late 19th century. This may have been due to the deterioration of the coca leaves and thus a decrease in pharmacologic activity during the long voyages from South America.

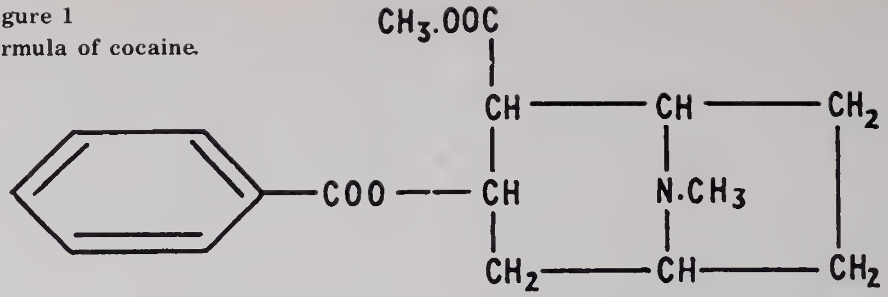
Although some confusion exists over the initial isolation of cocaine, credit is generally given to Albert Neimann, a German who extracted and purified an alkaloid he called cocaine around 1858.[2] In 1884, Sigmund Freud purchased a gram of cocaine and began experimenting with the drug. In July 1884, he published the first of his four papers on the drug. He suggested usage of cocaine as a stimulant in treatment for digestive disorders, cachexia, morphine and alcohol addiction, asthma, and also mentioned its local application.[3] Carl Koller, an associate of Freud's, published evidence of cocaine's local anesthetic property and use in ophthalmologic surgery in September 1884 and generally receives credit for this discovery.[2] The American surgeon, William Halstead, reported nerve block by injection of cocaine through his own experimental usage.

Over the years, the use of cocaine grew both medically and commercially. Because of its stimulating effect on the central nervous system, it was incorporated into many commercial products. The most famous of these was Coca-Cola, which was first introduced as a patent medicine in 1886 and contained cocaine until 1903, after which a decocainized version of the coca leaf was used in preparation of the cola drink. Cocaine was also widely used in wines, liquors, cigarettes, chewing gum, and throat lozenges. By the early 20th century, the drug's abuse potential was being realized, and in 1914, the Harrison Narcotic Act and subsequent ammendments restricted cocaine to "medical and other legitimate uses." Cocaine has been classified as a Schedule II drug since 1970.

Pharmacology

The chemical name for cocaine is benzoyl methyl ecogonine (Figure 1). One hundred years after its isolation, the pharmacologic

Figure 1
Structural formula of cocaine.



properties of cocaine are still not completely understood. The following are cocaine's main actions:

Local Anesthetic Actions

Cocaine blocks the conduction of nerve impulses when brought into direct contact with nerve tissue by interfering with the generation of nerve action potentials. This occurs in a concentration as low as 0.02%. Higher concentrations are required for anesthesia by topical application to mucous membranes.[4]

Sympathetic Nervous System Actions

Cocaine blocks the uptake of endogenous or exogenous catecholamines at the adrenergic nerve endings. This produces increased catecholamine levels resulting in vasoconstriction. This action, unique among the local anesthetics, is one reason for its extensive use in otolaryngologic surgery. Sympathetic stimulation also produces tachycardia, which combined with vasocontriction, can produce a marked rise in blood pressure.[4]

Central Nervous System Actions

Cocaine's central nervous system (CNS) effects are the main reason for its use and abuse as a recreational drug. Cocaine is classically thought to act by stimulation of the central nervous system downward, meaning the cortex is first affected, followed by stimulation of lower motor centers. This may be an action similar to alcohol, which causes a depression of inhibitory cerebral pathways rather than true stimulation.[4] However, more recent studies have indicated the CNS effect of cocaine is probably more complex, involving altered metabolism of norepinephrine, dopamine, serotonin and acetylcholine.[5] Cocaine produces euphoria followed by central nervous system depression. The respiratory center is initially stimulated, producing rapid shallow breathing, followed by respiratory depression.

Skeletal Muscle Effects

There is no evidence that cocaine directly increases the intrinsic strength of muscle contraction; physical endurance is improved because of cocaine's "fatigue masking" effect.

Body Temperature

Cocaine is markedly pyrogenic through several mechanisms. Vasoconstriction produced by the cocaine reduces body heat loss. Increased muscular activity may increase heat production. There is also a direct pyrogenic effect on the heat regulating centers of the body.

Eye Effects

Ophthalmologic effects of cocaine are mainly of historical importance. Cocaine produces corneal anesthesia when applied topically, but also clouds, pits and ulcerates the cornea; therefore it is no longer in use.

Cocaine Kinetics

Multiple factors affect absorption, metabolism and elimination of cocaine.

Absorption

Cocaine is readily absorbed from mucosal surfaces including nasal, oral, tracheobronchial and gastrointestinal mucosa. Intranasal cocaine kinetics are relevant because of its usage in nasal surgery and the usage of this route in cocaine abuse. Intranasal absorption rate is variable, probably as a result of a fluctuating degree of local vasoconstriction. Nasal application of 1.5 mg/kg of cocaine produces peak plasma concentrations at 15-60 minutes with a gradual decrease over three to five hours. Cocaine metabolites are measurable in plasma within three minutes and for six hours after application.[6] Cocaine can be demonstrated to be present on nasal mucosa for at least three hours after administration, introducing yet another variable to the complicated picture of cocaine absorption.[6]

Oral Ingestion

Cocaine is readily absorbed when taken orally with relative bioavailability found to be the same as intranasal cocaine. Absorption occurs in the alkaline environment of the small intestine.[7]

Inhalation

Cocaine is rapidly absorbed from the tracheobronchial mucosa, probably reflecting the large surface area of the lung. Absorption may occur with either instilled cocaine hydrochloride solution or with the inhaled free base form of the drug. A survey of otolaryngologists showed more toxic reactions had occurred with tracheobronchial application than with any other mucous membrane.[8]

Parenteral Administration

Cocaine can also be injected subcutaneously, intramuscularly or intravenously, although the usage of these routes today is confined to medical research and street abuse. Use of cocaine by infiltration fell into disrepute after 20 deaths were attributed to cocaine usage during tonsillectomy in 1924.[9]

Physiologic and Subjective Effects

The intravenous, intranasal, oral or inhalation routes of cocaine usage all produced subjective highs.[5, 10, 11, 12] Several studies have attempted to correlate plasma cocaine levels with subjective effects. Javaid, et al, found positive relationships between peak plasma concentrations of cocaine and physiologic and subjective responses following intravenous and intranasal usage.[10] VanDyke, et al, reported peak "high" ratings to be related to both dose and peak plasma concentrations and found subjective effects to be more intense when plasma levels were increasing rather than when they were decreasing.[11]

Metabolism and Excretion

Cocaine is rapidly metabolized in humans by plasma and hepatic cholinesterases.[13] Therefore an increased cocaine effect may be seen in patients with a pseudocholinesterase deficiency or in patients using cholinesterase inhibitors. The major metabolites of cocaine, benzoylecgonine and ecgonine, are excreted in the urine.[13]

Clinical Use of Cocaine

Cocaine is used clinically as a hydrochloride salt or as a solution of cocaine hydrochloride. Cocaine powder, which is a free base form, is also available. Plasma levels and physiologic effects reflect primarily the total dosage of the drug rather than the formulation or concentration of the drug that is given.[14]

Currently, clinical usage of cocaine is limited to topical anesthesia in the upper respiratory tract, particularly in nasal surgery. This includes septorhinoplasties, nasal polypectomies, antral punctures and irrigations, nasal biopsies and control of epistaxis. It provides effective anethesia accompanied by intense vasoconstriction which decreases blood loss and improves visualization during the operative procedure. Cocaine is applied by cotton tipped applicators, nasal packs or as a spray.[15, 16] Oral biopsies can also be done following cocaine anesthesia. Cocaine anesthesia is often useful in direct and indirect laryngoscopy.[15]

Surprisingly, the safe and effective cocaine dosage remains largely based on empiric data. Toxicity is affected by the route of administration, method of application and rate of metabolism. Variables in patient condition and other simultaneously administered drugs also affect cocaine's toxicity.

Lethal dosage determinations have proven to be difficult because animal cholinesterase levels differ from human levels. Cocaine metabolism also continues postmortem, so plasma levels are difficult to determine, even in the fatal overdose patient.

The most commonly used topical dose of cocaine is 200-300 mg. or 3-4 mg/kg. This dose does produce systemic effects. Resnick, et al, showed that 10 mg. of intranasal cocaine produced no changes from placebo, 25 mg. produced minimal changes in systolic blood pressure and 100 mg. produced significant dose related effects on heart rate and blood pressure, as well as subjective changes.[12] Manufacturer's literature states that the fatal dosage is estimated to be 1.2 grams but notes rare, severe effects at 20 mg.[17] In spite of the lack of precise dosage recommendations, cocaine remains a relatively safe drug clinically. A survey in 1977 showed five deaths and 34 severe reactions in 108,000 usages of cocaine.[18]

A combination of cocaine and epinephrine in 1:1,000 concentrations for topical application has shown no effect on anesthetic duration or cocaine levels.[15] However, subcutaneous injection of lidocaine with epinephrine 1:50,000 or greater dilutions in combination with topical cocaine is safe and necessary to control hemorrhage and produce anesthesia from nonmucous membrane surfaces.[15]

Side Effects and Toxicity

Acute cocaine toxicity is manifest as central nervous system stimulation including excitability, anxiety, headaches, nausea, vomiting and initial respiratory stimulation. Tachycardia and elevated blood pressure occurs. Mydriasis and fever can also occur. Progression to delirium, convulsions, Cheyne-Stokes respiration and respiratory arrest can occur rapidly.

Treatment of acute toxic reactions involves removal of the source of the drug, if possible. Artificial ventilation may be required. Beta blockers can be used to treat cardiac effects and diazepam may be helpful for convulsions.

Chronic use of intranasal cocaine can result in nasal septal ulcerations and perforations due to mucosal necrosis from vasoconstriction. Chronic rhinitis can occur from repeated intranasal usage, similar to atrophic rhinitis seen with chronic nasal spray abuse. Corneal clouding and ulcerations have resulted from repeated use of cocaine eye drops. Cocaine has been shown to cause nausea, vomiting and vertigo when applied to the middle ear.[16]

Cocaine Abuse

Cocaine abuse and recreational use is currently subject of much popular interest. Cocaine was rediscovered as a recreational drug in the early 1970's. Increased use of the drug was supported by user beliefs of cocaine's aphrodisiac properties, its enhancement of mental and physical activities, and belief that it was safe and nonaddictive.

Data on cocaine usage is continually changing. Survey data from 1983 noted that the number of people who have tried cocaine at least once went from 5.4 million to 21.6 million in 1982.[3] Current users rose from 1.6 million in 1977 to 4.2 million in 1982.[3]

The intranasal route is still the most common route of cocaine administration, although intravenous use and smoking of the free base form is also popular.

Siegel conducted a longitudinal study of users from 1975 to 1983.[3] The average purity of the subject's cocaine ranged from a low of 13.9% in 1980, to 75.0% in 1983. The most common diluents used were mannitol, lactose, inositol, lidocaine and phenylpropanolamine. Preparation of cocaine free base resulted in an average purity of 95%. Intranasal users in this study administered cocaine in 20-50 mg. amounts per dose (uncorrected for purity), and used between one to three grams per week in the period from 1979-1983. Cocaine free base smokers used approximately 100 mg. per "hit." Average daily use among these subjects was 1-1.5 grams per day. Individual usage amounts ranged from 1-30 grams per 24 hours with some users reporting up to 150 grams in 72 hours.

Addiction Potential (Dependence, Abuse)

Cocaine is a dependence inducing substance and can lead to addictive behavior.

Three criteria define a drug as having the potential for producing addiction. They are 1) that the drug is psychoactive, 2) produces euphoric effects and 3) is a biologic reinforcer, that is the chemical activity in the drug is sufficient to establish and maintain compulsive ingestion by the user.[5] According to the National Institute of Drug Abuse (NIDA), drug dependency is a state in which the person's freedom of choice is being compromised by the physical effects of the drug on the brain and central nervous system. In addition to these criteria, dependency is further characterized by a tendancy of the users who have stopped to relapse and go back to using the drug despite their desire to quit. Cocaine has been shown to produce these effects in humans and for this reason is classified as a dependence producing drug.

Summary

Cocaine is a very useful drug for many upper respiratory tract surgical procedures and is unrivaled for its ability to decongest and vasoconstrict the nasal passages. Unfortunately, most of the publicity that has surrounded cocaine in recent years has been very negative causing questions to be raised regarding its legitimate medical use. This review is presented to help clarify the pharmacology and appropriate medical use of cocaine.

It is our suggestion that to prevent mistaken injections of cocaine solutions, they should be colored by the pharmacy or purchased in prepackaged unit dosage quantities. To prevent potential overdosing of patients, a test dose of cocaine should be placed into the mucosa prior to instilling the total dose that is to be used for the surgery. Until a more accurate means of measuring cocaine blood levels is clinically available, we recommend using the standard dose of 4 mg/kg up to 300 mg for topical anesthesia.

As with all narcotics, it is imperative that those physicians who use cocaine be very familiar with the side effects and potential complications of the medication. However, due to its unique properties, we feel that the use of this medication should not be restricted more than any other Schedule II medication.

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Experience with Continence-Preserving Procedures at University of Nebraska Hospital

JON S. THOMPSON, M.D.*

MANY patients with ulcerative colitis and familial polyposis require operation at some time during the course of their disease. Proctocolectomy with conventional ileostomy has been the standard therapy for these conditions. With improvements in ileostomy construction and equipment, the majority of osteomates lead relatively normal lives. However, many have restricted work, travel, dietary, athletic and other social activities. Thus, there has been recent enthusiasm for continence-preserving procedures in the management of selected patients with benign colorectal disease. These include the continent ileostomy, first reported some 15 years ago, and more recently, the ileoanal anastomosis with ileal reservoir. The experience with 16 patients undergoing continence preserving procedures at University Hospital since 1982 was reviewed to evaluate the outcome of these newer procedures.

Materials and Methods

Patients undergoing either continent ileostomy or the ileoanal anastomosis with ileal reservoir at the University of Nebraska Hospital have been studied prospectively since 1982. There were 8 men and 8 women ranging from 23 to 57 years of age. The indication for operation, operative procedure, and postoperative outcome, including morbidity and mortality, functional results and patient satisfaction have been reviewed.

1) Continent Ileostomy

The continent ileostomy has two components (Figure 1A). First a non-peristaltic ileal pouch is constructed from 30cm of distal ileum to function as an internal reservoir in place of the external reservoir used with conventional ileostomy. The pouch is created by anastomosing the two segments of intestine with two layers of a running absorbable suture. This pouch dilates from an initial volume of 75cc to 400cc after several months so that it requires emptying 3 or 4 times per day to accomodate the daily ileal output of 800-1000cc. Second, an intussuscepted nipple valve is made from the terminal 15cm of ileum beyond the pouch to provide continence for gas and stool. To prevent slippage of the valve the serosal surface is scarified with electrocautery, excess mesentery and fat are removed, and the intussuscepted ileum is anchored securely with rows of both staples and through and through, interrupted, non-absorbable sutures over a 5cm segment. Mesh has not been used to reinforce the valve. The pouch is positioned in the right lower quadrant. A short efferent limb is matured as a flush stoma just superior to the pubic hairline. A soft 34fr catheter is used to intubate the pouch. This is placed at the time of operation and maintained on gravity drainage for four weeks postoperatively. Intermittent

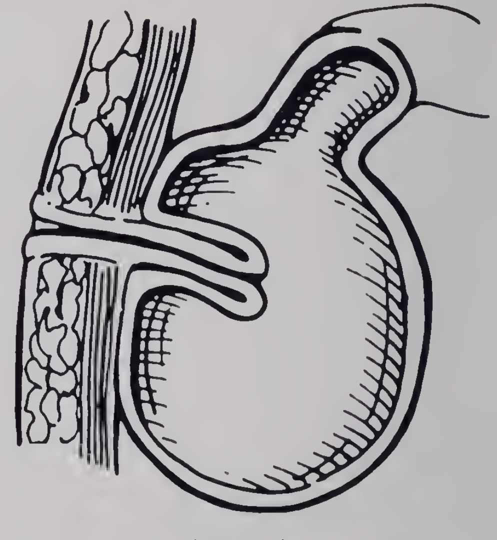

Figure 1A
The continent ileostomy consists of a reservoir and a nipple valve leading to a stoma.

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*Correspondence to: Jon S. Thompson, M.D., Dept. of Surgery, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68105.

catheterization is then begun to permit gradual distension of the pouch. The stoma is covered with a simple bandage. Dietary restrictions are minimal.

2) Ileoanal Anastomosis With Ileal Reservoir

The procedure is generally performed in two stages. At the first operation the colectomy and mucosal proctectomy are performed with construction of the ileal reservoir and ileoanal anastomosis. A diverting ileostomy is also constructed. At a second operation two to three months later, after healing has been documented by a barium enema, the ileostomy is closed. Critically ill patients may require a three stage approach with an initial subtotal colectomy, ileostomy, and Hartmann pouch.

The colon and rectum are removed via an abdominal incision leaving a 6-8cm rectal cuff that has been mobilized down to the Levator muscles. An ileal reservoir is constructed from the distal 45cm of ileum with a two layer, running anastomosis of absorbable suture in either a "J" or "S" configuration depending on the length of the mesenteric vessels. The rectal mucosa is dissected off the internal sphincter beginning at the dentate line and continuing for a distance of 4 to 5cm cephalad via a perineal approach. The rectal stump is everted and the proctectomy completed proximal to the sphincter muscle, leaving a short cuff of rectal muscle. The pouch is then pulled through the sphincter muscle and anastomosed to the perianal skin (Figure 1B). An ileostomy is fashioned proximal to the pouch in the right lower quadrant. Closure of the ileostomy is performed via a circumferential peristomal incision obviating the need for a formal laparotomy:

Results

Continent ileostomies have been created in one man and 2 women between 23 and 39 years of age. Two had ulcerative colitis with severe perianal disease and one had rectal polyposis after a previous subtotal colectomy for familial polyposis. One patient required local revision of the stoma after superficial sloughing resulted in stenosis. There have been no major complications associated with the pouch or nipple valve. The average post-operative stay was 14 days. Follow-up ranges from 20 to 42 months and all patients have remained continent. Intubation is performed 4 to 5 times per day and requires only 5-10 minutes. All patients have returned to normal activity and employment. One patient has since become pregnant and delivered.

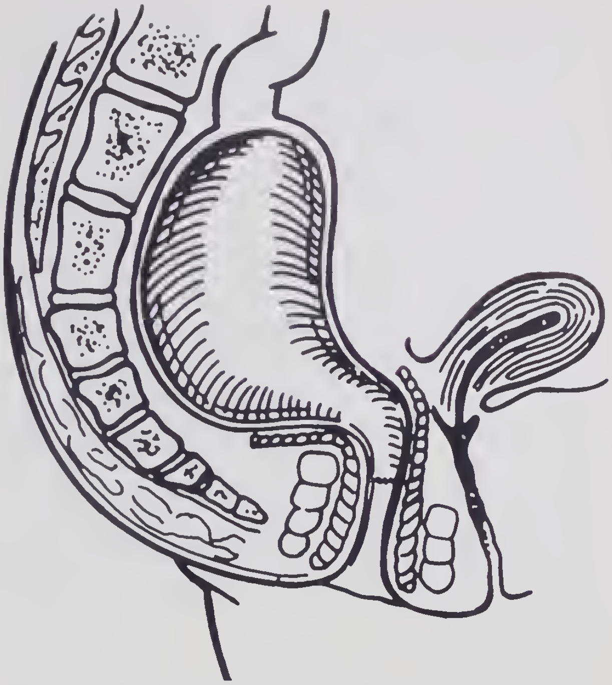

Figure 1B
The ileoanal anastomosis with ileal reservoir consists of a reservoir which is pulled through the rectal sphincters and anastomosed to perianal skin.

Ileoanal anastomosis with ileal reservoir has been performed in 7 men and 6 women ranging between 23 and 57 years of age. Twelve patients had ulcerative colitis and one had familial polyposis. The procedure was performed in two stages in 9 patients, three stages in 2 patients and without a diverting ileostomy in 2 patients.

The length of operation for the ileoanal procedure averaged 6-1/2 hours (range 4 hours 40 minutes to 9 hours 25 minutes) but the six most recent operations took less than 6 hours to perform. Average intraoperative blood loss has been 1300cc (range 250cc to 2200cc). Seven patients (54%) required blood transfusion. Nine pouches were constructed in an "S" configuration and there were 4 "J" pouches. There were 7 loop and 4 end ileostomies created for temporary diversion of the fecal stream. Ileostomy closure has been performed in 9 patients a mean of 13±5 weeks after the ileoanal anastomosis. Two thirds were closed within 10 weeks of the primary procedure.

The average postoperative hospital stay has been 12 days after the ileoanal procedure and 5 days after closure of the ileostomy. Ileostomy obstruction requiring reoperation in one patient and a pelvic abscess drained percutaneously in another have been the only major postoperative complications. Minor complications have included transient peroneal nerve palsy, urinary retention, partial intestinal obstruction which resolved, and high ileostomy output. There has been no evidence of sexual dysfunction. Three patients had persistent sinus tracts at the anastomosis which delayed ileostomy closure beyond 13 weeks. These sinus tracts and another diagnosed after ileostomy closure have healed without operation. A stricture at the ileoanal anastomosis requiring dilation in one patient, pouchitis in another and a perianal abscess occurring several months after ileostomy closure have been late complications.

Functional results have been excellent in the eleven patients evaluable with follow-up from one to eighteen months. Nine patients (82%) are completely continent during the day with a few having minimal mucus seepage at night. Two patients who are continent during the day wear perianal pads consistently at night and intermitently during the day for more pronounced seepage. All patients can defer defecation for at least an hour after the urge begins. Most can distinguish between stool and gas within a few months after ileostomy closure. The frequency of bowel movements is shown in Figure 2. Initially there are 12-15 liquid stools daily which are managed by antidiarrheal medications. Within 3 months patients average 6-7 bowel movements per day with 0-1 at night. Stool frequency and consistency and control then improve more slowly over the next 12 months.

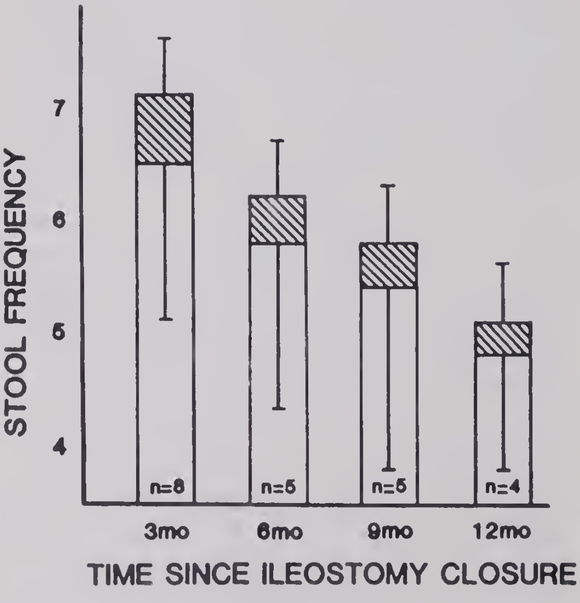

Figure 2
Stool frequency after ileostomy closure - continued improvement occurs after 12 months.

All patients have been satisfied with the functional outcome and would prefer the ileoanal anastomosis to ileostomy. Five patients (56%) returned to work prior to ileostomy closure with all patients returning to normal work and activity within 2 months after ileostomy closure. Some patients have minor restrictions in their diet including decreased consumption prior to bedtime to avoid nocturnal bowel movements and avoidance of certain poorly digested foods.

Discussion

Approximately one third of patients with ulcerative colitis and virtually all patients with familial polyposis require operation to control symptoms, treat complications or prevent malignancy.[1] Surgery is effective therapy for these conditions, can be performed with acceptable morbidity and mortality, and is curative, allowing patients to return to their normal physical well being. However, operation continues to be delayed in many patients because the physician or patient are unwilling to accept life with a permanent ileostomy.

Improvements in ileostomy construction and equipment, as well as increasing social acceptance, permit most patients with ileostomy to lead relatively normal lives. Roy et al[2] found that 89% of patients with an ileostomy were in good health and 95% returned to work. Dietary habits were unrestricted in 66%. Eighty-two percent of patients enjoyed various types of leisure activity but sporting activities were limited in 50%. However, some patients cannot accept the stoma psychologically. Embarrassment, inconvenience of the appliance and stomal complications may limit work, travel, dietary, athletic and other social activities, often in subtle ways. Thus, alternatives to conventional ileostomy have been sought.

The continent ileostomy, composed of an intestinal reservoir and nipple valve, was first described by Kock in 1969.[3] Most patients have found intermittent intubation of the continent, flush stoma to be more acceptable than conventional ileostomy with an external appliance. McLeod and Fazio[1] reported that sports, leisure activities, work, clothing selection and travel were restricted in less than 15% of patients with the continent ileostomy compared to 50 to 90% of patients with conventional ileostomy. Eighty percent of patients undergoing conversion of a conventional to continent ileostomy felt their body image was better and sexual life was improved in 68%. If complications were to arise, 97% of patients would have revision rather than removal of the continent ileostomy. In addition, the costs of supplies for a continent ileostomy is $200 per year versus $475 for the conventional ileostomy.

The continent ileostomy is an alternative for patients with ulcerative colitis and familial polyposis. Crohn's disease, previous intestinal resection, malignancy and inability to care for the continent pouch are generally considered contraindications to the procedure. The popularity of the continent ileostomy has been limited because a stoma still exists and complications have been frequent. While continence is achieved in 90% of patients, one fourth to one third require revisions, usually for complications with the nipple valve.[5-8] Five percent of patients have minimal or partial incontinence for gas or stool, which does not require wearing an appliance. Appliances are worn by 2-3% of patients and pouches are subsequently excised in an equal number because of persistent problems or Crohn's disease. Postoperative complications occur in 25-30% of patients. While the long term outcome has been satisfactory in many patients, inflammation of the pouch, malabsorption and delayed nipple valve complications remain a concern. The increasing success and popularity of the ileoanal reservoir and anastomosis have largely confined the use of the continent ileostomy to patients who are dissatisfied with conventional ileostomy or have severe perianal disease with anal sphincter dysfunction.

The ileoanal anastomosis with ileal reservoir has two components. First, the diseased rectal mucosa is removed from the underlying anal sphincter muscle. Continence is preserved since the rectal mucosa itself is not critical for maintenance of anal function. Secondly, a pelvic reservoir is constructed from the distal ileum and anastomosed to the perianal skin. The normal reservoir capacity of the rectum is important to maintain continence and minimize stool frequency. This is illustrated by the poor functional results with the ileoanal anastomosis without reservoir.[9] When performed with total abdominal colectomy, this procedure is curative, since all diseased mucosa is removed, and maintains gastrointestinal continuity. Thus, the disease is effectively treated but a permanent abdominal wall stoma is avoided. Since total proctectomy is not performed, the perineal wound is avoided and sexual and urinary dysfunction are minimized. Like the continent ileostomy this procedure is appropriate for patients with ulcerative colitis and familial polyposis but is contraindicated in patients with Crohn's disease, previous intestinal resection, anal sphincter dysfunction and advanced malignancy.

Our experience with this procedure has been similar to that reported from other centers. Mortality is rare and occurs no more frequently than with proctocolectomy and ileostomy. Complications occur in 40-50% of patients, the most frequent being sepsis, intestinal obstruction, stricture, and ileostomy dysfunction. In the recent Mayo Clinic experience[10] none of the men became impotent although 9% had retrograde ejaculation. Eight percent of women reported dyspareunia. Sexual and urinary dysfunction were also minimal in the present study. Postoperative hospitalization averages 12 days after the colectomy and 5 days after ileostomy closure which compares favorably with other reports.[10-12] While the long term results are gratifying, the extensive operation (blood loss and operating time), high morbidity rate, and prolonged convalescence required in many patients must be carefully discussed and considered prior to undertaking this procedure.

The functional results following ileoanal anastomosis with ileal reservoir have been quite satisfactory. The results in the present study are similar to other reports. Eighty-five to ninety percent of patients are completely continent. Five to ten percent have intermittent incontinence and 5% remain with a permanent ileostomy either due to complications or a poor functional result.[10-15] Nocturnal seepage occurs in approximately one third of patients and may necessitate wearing a pad. Stool frequency is initially quite high but averages 6-7 per day by

3 months after ileostomy closure. Stool frequency, particularly nocturnal stool frequency, stool consistency and sphincter function continue to improve over the next 12-18 months. These changes occur as the pouch enlarges, sphincter tone improves and the intestine absorbs more of the fecal fluid. Stool frequency can vary markedly with diet, intercurrent illness and transient inflammation of the reservoir (pouchitis). Patient satisfaction with the procedure has been high and social, work, leisure and dietary restrictions are minimal.[13] Ninety percent of patients prefer this procedure to ileostomy.[13]

Functional outcome appears to be influenced by a variety of factors. Females, younger patients and those with familial polyposis rather than ulcerative colitis have a lower stool frequency and better anal function.[10-12,15] The procedure is more difficult to perform in males and older patients are more likely to have compromised anal sphincter function. The mucosal proctectomy is much more difficult when the mucosa is diseased. Functional results are slightly better when the procedure is performed at the same time as colectomy and when ileostomy closure is accomplished within a few months of the ileoanal procedure.[10] One of the continuing areas of major controversy is the optional configuration of the reservoir. An "S" shaped reservoir achieves a larger capacity, can reach further into the pelvis, permits an end to end anastomosis, and may result in a lower stool frequency than the "J" pouch. However, many of these patients cannot evacuate spontaneously, particularly when the efferent ileal limb is greater than 2cm. The "J" pouch is easier to construct but more difficult to anastomose. While the "J" configuration can result in a smaller reservoir and perhaps increased stool frequency, spontaneous evacuation occurs in virtually all patients and control is comparable to the "S" pouch.

As with any new operative procedure, the ileoanal anastomosis and reservoir has undergone several technical modifications. The length of the rectal dissection and muscle cuff, pouch construction, and technique of the mucosal proctectomy are continuing to evolve. However, the overall outcome and functional results have been quite similar with many of these variations. Thus, while these technical aspects continue to be investigated, current results suggest that this procedure should be offered to the majority of patients with ulcerative colitis and familial polyposis.

Summary

The outcome of 16 patients undergoing continence preserving procedures for ulcerative colitis and familial polyposis was reviewed. Both the ileoanal procedure and continent ileostomy result in an improved quality of life, the former without a stoma. However, these procedures involve a more extensive operation, increased morbidity and often prolonged convalescence. These factors must be discussed and considered preoperatively. However, the longterm results to date have been quite satisfactory. Continence preserving procedures should be offered as an alternative to the majority of patients with ulcerative colitis and familial polyposis.

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Home Blood Pressure Monitoring

ROBERT L. GRISSOM, M.D. and
WILLIAM F. GUST, M.D.
The University of Nebraska Medical Center
RAY OLSON, M.A.
Health Educator, State of Nebraska Department of Health

PHYSICIANS should know what their patients are doing about their health. Home blood pressure monitoring has become big business and to a large extent, medical doctors are not involved. Recently, a trade journal stated that "Home medical electronic devices now represent one of the hottest consumer markets, with a current growth rate of more than 40% a year".[1] The last special report of the National High Blood Pressure Education Program Committee[2] was generally favorable to the use of these electronic devices. But physicians have various views about these home units: as a nuisance, interfering with his/her management; a novelty; or a significant help in improving patient care. For the most part these devices are sold by pharmacists, department stores, or mail order outlets. The principal advice as to the choice of a specific unit comes from the pharmacist or salesperson. Although the Food and Drug Administration has nominal control of the accuracy and reliability of these instruments, major control seems to be with the manufacturer. A recent report in the American Druggist entitled "Market for Home Blood Pressure Kits Explodes" stated that "rapid sales growth is foreseen as consumers become more aware of the dangers of hypertension and as digital units come down in price".[1] About 125,000,000 such units were sold in 1983.

How reliable are the units? In 1985 a report in Hypertension,[3] a journal of the American Heart Association, compared sixteen semiautomatic devices then available with a standard sphygmomanometer. Correlation of the systolic pressure was considerably better than correlation with the diastolic pressure. However, of those sixteen units most are not available in 1986 in the Omaha or Lincoln market. Calls to your local pharmacy might disclose that a few are for sale. Home use of the stethoscope auscultatory method seems actually to be declining.

However, use of electronic instruments based on either microphones or the oscillometry method is increasing. The simplicity and reproducibility of oscillometry units appear to be advantages and they may become the principal units available in the future. New designs are marketed and some are reasonably priced; a local drug store in Omaha had three oscillometry electronic units available for under $50. We have used such a unit in the intensive care unit, in anesthesia, in research studies, and at "mass screening sites". Our electronic unit cost $370.00 and has functioned well for us in a noisy environment, seemingly with less observer error than with our reference mercury auscultatory units.

Possible advantages to home units are: permitting the patient to feel that he is cooperating in management of his/her blood pressure; measuring the blood pressure at the worksite or elsewhere; and motivating the patient to take medication more regularly based on the numbers seen, rather than just on "feelings". Self-measurement may even lead to simplification of the treatment program; this may especially be helpful when using non-pharmacologic management of blood pressure. Through frequent measurements at various times and activities, the patient may learn to appreciate the variability of blood pressure readings during the day and from moment to moment.

Disadvantages relate to inadequate training by the patient or his relative in the technique with inaccurate readings. The patient might then become overly concerned about a falsely high or low result. Such pressure readings due to machine artifact could give the patient either anxiety or false reassurance. Therefore, home pressure measurement is not suitable for everyone. Properly performed and interpreted, there would need to be fewer return visits to see the physician. But self-diagnosis and self-treatment, presumably with undesirable results, may result.

Physicians should be aware that the 1984 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure[4] has designated a new category of blood pressure elevation; diastolic level between 85 and 89 mmHg is "high-normal blood pressure." The "normal" adult systolic pressure, when the diastolic blood pressure is less than 90, should be under 140 mmHg. However, at ages 14-18, the upper normal level is less than 135/90. At ages 10-14, normal level is less than 125/85 mmHg.

The National High Blood Pressure Education Program[5] has recommended that users of home devices be provided with information about where to follow up on an elevated blood pressure reading. This information may be received from "physicians, other health professionals, voluntary health agencies, employee health programs and public health departments." The printed instructions should indicate that the arm should be supported and bared and that the appropriate-sized cuff be used. Also this group has recommended that "in addition to assuring that each patient understands the procedure, the supervising professional should make a particular effort to recommend accurate and reliable equipment". This means that the patient should check out the equipment in the doctor's office. Y-connectors with three openings (available at medical supply stores, automobile supply stores or hardware stores) are helpful in making comparison with a mercury sphygmomanometer unit, but in their absence careful simultaneous measurements in the two arms will usually suffice. Calibration should be checked at least once a year against a standard mercury sphygmomanometer, according to the American Heart Association and the American Red Cross.[6]

The chart which follows may be helpful to you and your patients in determining which type of equipment is best for home measurement. The American Heart Association also has recently published a brochure entitled "Buying and Caring for Home Blood Pressure Equipment," which provides some similar information for patients as well as professionals.[7] Published recommendations about 30 blood pressure units in Consumer Reports[8] is another source of information but because of newer developments is slightly out of date. The report in Medical Instrumentation by Carroll and Latman[9] also may be helpful.

Portable electronic units using microphones:

Cost and Availability:

$20-$50. Available at drug, department and medical supply stores.

Method of Operation:

Usually battery operated only. Person applies and inflates cuff to proper level. Machine automatically deflates. Microphone in cuff picks up sounds of blood flow which the machine converts to a B.P. reading. Digital readout provided, or the person taking B.P. must relate a flashing light to numbers on a dial to get reading.

Comments/Concerns:

Prices are now attractive. May be good for persons not able to hear through stethoscopes. Recent studies have shown high failure rates and some problems with accuracy.[9] However, a national committee says they are "sufficiently accurate for home use" if one is aware of potential problems.[2]

Microphone must be placed over brachial artery for accurate reading. Microphone may also pick up outside noise leading to inaccurate reading, but more expensive models claim to have noise filters. Accuracy may also be affected by body movement. Large and small persons need different cuffs which have to be specially ordered. Should be checked regularly for accuracy using a mercury manometer and "y" tube. Have to be sent back to factory for adjustment.

Portable electronic oscillimetric method:

Cost/Availability:

$35-$500 plus. Available in some drug stores and medical supply stores. Expensive models need to be ordered from manufacturer.

Method of Operation:

Less expensive units use battery only. More expensive units use battery or A/C. Person applies cuff and inflates to proper level. Machine automatically deflates, and detects movement made by artery under cuff and converts it to a digital blood pressure reading. Deflation rate adjustable on some models. Large and small cuffs sold with package on more expensive models.

Comments/Concerns:

Little information is available on accuracy except claims of manufacturer. The most reliable types (like those used to monitor critical care patients) are the most expensive.

Since a microphone is not used, room noise is not a problem. Very important to keep arm and equipment immobile during measurement.

Portable aneroid sphygmomanometer with stethoscope

Cost/Availability:
$20-$80. At drug stores, department stores and medical supply stores. Some "old line" manufacturers have concentrated on these units.

Method of Operation:
Person applies cuff, inflates to proper level, deflates at proper rate, listens for sounds of blood flow through stethoscope, and interprets sound while looking at dial to get reading.

Comments/Concerns:
Requires more skill from observer as well as good hearing. It is harder to take one's own blood pressure. Accurate method if person properly trained.

Adjustments can usually be made locally by a trained person. Varieties of cuff sizes easily available at medical supply stores (up to six sizes).

Inexpensive models are more likely to become inaccurate and are harder to adjust. Needle at zero does not mean they are accurate.

Some instruments have the stethoscope sewn under the cuff to facilitate self-measurement, a useful improvement.

Portable mercury sphygmomanometer with stethoscope cost and availabilty:

Cost and Availability:
$20 to over $100. At medical supply stores and some drugstores.

Method of Operation:
Similar to physician's office units.

Comments/Concerns:
Requires more skill than electronic method. When properly done, this method is the medical standard for all the rest. Major hazard lies in breakage of the tube and mercury spill. Although maintenance is minimal, cleaning and sometimes replacement of some mercury are required periodically.

Summary:

Home blood pressure measurements are here to stay. Some patients and some physicians will find them useful. If our patients improve their compliance with a home blood pressure program, that is a real benefit. Some years ago it was widely reported that of all patients taking treatment, only 50% were achieving good control. We should do better than that. Doctors have an obligation to see that patients measuring blood pressure at home have reliable units, use them properly, measure their blood pressure at appropriate intervals and report back for counsel. We should become familiar with these units because we may be entering a phase where home blood pressure units may be as common as home blood sugar testing units.

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Orbicularis Oris Muscle Flap

JOEL N. BLEICHER, M.D.
Creighton University, School of Medicine
MARTHA AROUNI, M.D.
Creighton University, School of Medicine

Case Report

THIS patient is a 59-year old female who presented to this institution in 1982 with a T-2, N-1, MO intraoral squamous malignancy. Because of the proximity of the tumor to the marginal mandibular nerve, it was sacrificed at the time of the original resection, when she underwent a jaw-tongue-neck resection. Reconstruction was with a pectoralis major myocutaneous flap for intraoral resurfacing, and no attempt to repair the ablated facial nerve was made at the time of initial resection.

Postoperatively, the patient did well; however, she complained bitterly of oral incompetence and lower lip anesthesia. She was able to eat and to propel oral contents to the throat with the unaffected side; however, liquid and solid food, which overflowed on the affected side, was unable to be detected on the lip because of anesthesia, and flowed over the lower lip because of the lack of tone and patulousness of the lower lip on the affected side. This was very disconcerting to the patient, and made her an alimentary hermit. The balance of the facial nerves were intact.

Operation

With the patient maintaining her weight, and no evidence of recurrent disease (Fig. 1), she was taken to the operating room approximately six months after the original surgery. A mandible reconstruction ensued. It was felt that if an innervated orbicularis oris muscle flap from the upper lip could be transposed into the lower lip, the patient might achieve oral competence and some semblance of facial mimicry symmetry.

An incision was made along the vermillion border of the upper lip on the affected side. A slip of innervated orbicularis oris muscle was dissected. This was approximately one (1) centimeter in width, and five (5) millimeters in depth. The dissection began at the midline and proceeded laterally to the corner of the mouth. An incision was made vertically in the central lower lip and a tunnel was developed on the affected side to the oral commissure. The upper lip orbicularis muscle flap was then inserted into the tunnel and secured to the scar at the midline of the lower lip. The wounds were then closed (Fig. 2).

The patient's postoperative course was benign. She appeared to have an intact and functioning oral sphincter in the immediate perioperative period (Fig. 3). There was immediate control of oral fluids after the

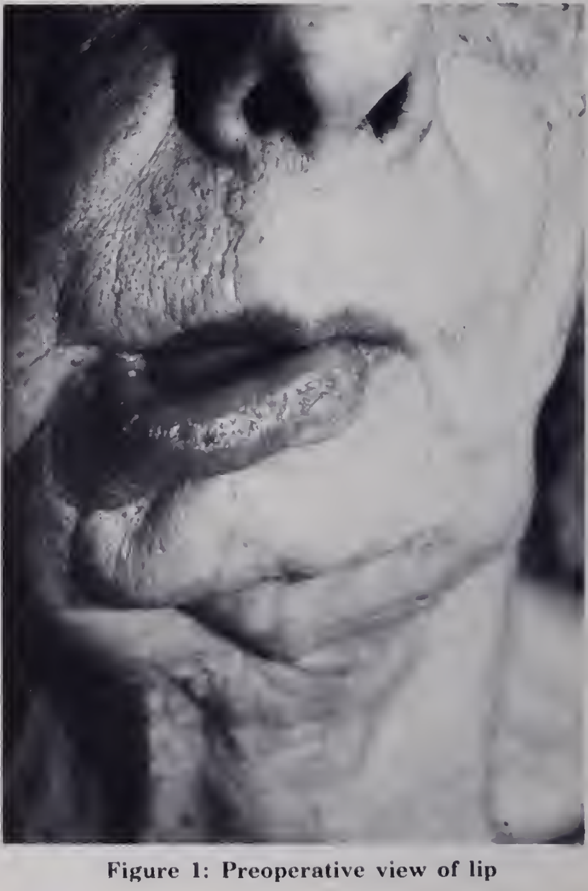

Figure 1: Preoperative view of lip

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*Correspondence and requests for reprints to: Joel N Bleicher, M.D., Creighton University, School of Medicine, Division of Plastic and Reconstructive Surgery, 601 North 30th Street, Omaha, NE 68131 edema subsided, and the patient was once again able to smile normally. Postoperative electromyographic studies confirmed the presence of functioning muscle in the lower lip.

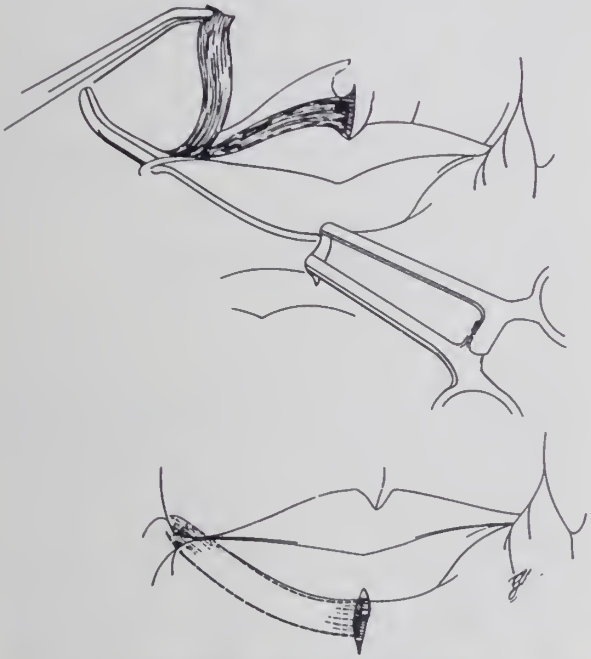

Figure 2: Operative technique

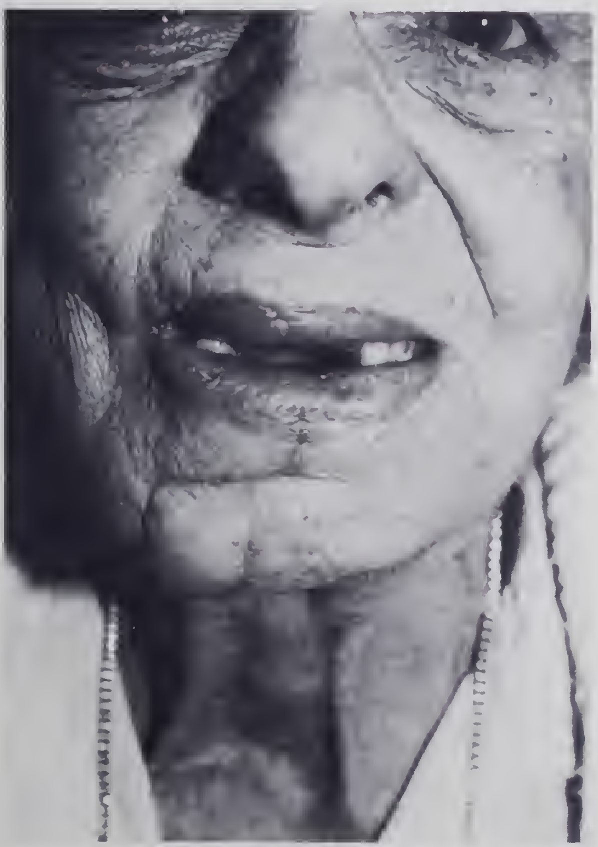

Figure 3: Postoperative results

Discussion

Palsy of any of the facial nerve branches after disease or injury can be devastating to the patient. Damage to the marginal mandibular nerve can be especially problematic because it innervates orbicularis oris, which serves the most mobile portion of the face. All of the muscles involved in the oral sphincter, except the buccinators and risorius, have their origin on the cranial bones, insert into orbicularis oris, and function as a group.[1] Orbicularis oris, as part of the pharyngo-bucco-orbicularis oris sphincter, is important for maintenance of oral continence,[2] as well as, expression of emotions.[1]

A number of procedures can be performed to improve or ameliorate the condition of nonfunctional facial muscles. Primary repair of the nerve itself is obviously most preferable when possible.[3] Nerve grafts can be performed after intracranial, intratemporal or extratemporal resection of the facial nerve, and ordinarily yield good functional results.[2] A cross facial nerve transplantation procedure can be undertaken when primary repair or transplantation is not possible, but must be performed within a short period of time after injury before muscle degeneration occurs;[2] and after transplantation, a period of time for reinnervation is required.[2, 3] The results have not been encouraging.[3] Nerve crossing procedures such as a VII-XII crossover have been employed but may lead to tongue paralysis, a delay in reinnervation,[3] and mass, uncoordinated rather than selective action.[2] Static suspension of paralyzed facial musculature acts as a sling only, not allowing for activity, just providing symmetry.[2] The surgeon must often overcorrect to allow for later stretching of the suspensory material,[4] and there is a compromise of mechanical efficiency.[4] Additionally the patient may generate a fibroblastic reaction to the material used, resulting in contraction or infection.[2] Dynamic suspension of paralyzed facial nerve structures usually involves transfer of a muscle innervated by the trigeminal nerve, such as the masseter,[2] and provides only for gross movement without restoration of mimetic function.[3] Extensive dissection is required for performance of this procedure,[4] and overstretching, adhesion formation, and vascular compromise may occur.[5] None of the above common procedures are well suited to the correction of this patient's problem.

A number of other techniques have been developed specifically for paralysis of the orbicularis oris muscle. Puckett employed a dynamic suspension using the paralyzed orbicularis oris to cross the defect as sort of a suspensory cord.[5] Freeman used a static support with Marlex mesh or fascia attached to the ascending mandibular nerves and wrapped around orbicularis oris.[4] Mahler simply plicated the paralyzed orbicularis oris upon itself, thickening and shortening it for an improved appearance.[6] None of these procedures meets all criteria for an ideal restoration of seventh nerve functions, which are facial symmetry at rest, voluntary motor control, separate and selective individual muscle group function, mimetic appropriateness, no loss of other head and neck functions and rapid restoration of tones and movement.[3]

Thus, a new muscle flap is described with an isolated superb result for reactivating the oral aperture. Though a number of procedures could have been employed to achieve this end, selection of the method of repair provided this particular patient with an excellent result. It should be added to the Plastic and Surgical armamentarium when similar conditions exists.

Summary

A new flap is described and added to the plastic surgical armamentarium to treat paralysis of the orbicularis oris of the lower lip. The procedure is simple and involves rotating a flap of nonparalyzed orbicularis oris muscle from the upper lip to the lower lip for reanimation. This paper presents an individual case where this procedure was carried out successfully. It appears to be an excellent flap for the treatment of this condition.

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SPECIAL ARTICLE

Consensus Conference on Cytomegalovirus and Herpes Simplex in Children:

Report of the Medical/Scientific Subcommitee

LYNNE D. WILLETT, M.D.*
PHILIP W. SMITH, M.D.
GREGG F. WRIGHT, M.D.
From the Departments of Pediatrics and Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska and the State Department of Health, Lincoln, Nebraska

IN August 1985, the State Department of Health sponsored a Consensus Conference to establish guidelines for the public school system and all care-takers of children regarding cytomegalovirus (CMV) and herpes simplex virus (HSV) infections in childhood. This was done primarily to implement guidelines for school participation for the medical community and the lay public. In doing this, Nebraska can hopefully avoid the complications and misunderstandings that have occurred across the country when children with these infections were admitted to the public school system.

CMV and herpes simplex viruses are both part of a larger category - the herpes virus family. Also included are varicella zoster (chicken pox and shingles) and Epstein Barr virus (infectious mononucleosis). Although CMV and herpes simplex belong to the same family and have certain characteristics that are similar, we will address them separately since their infectious potential is different.

Cytomegalovirus

CMV is an ubiquitous organism exhibiting very high prevalence in the community. Most adults (50 to 90%) exhibit antibodies to this virus indicating infection in the past.[1-5] In recent epidemiologic studies of daycare centers, random urine cultures for CMV were positive in 40-60% of children by one year of age.[6] Positive cultures were found in 10-50% of all children less than four years of age. Importantly, the majority (50-100%) of workers and 56-88% of parents had antibody to CMV. These data indicate that CMV infection is extremely common among young children. The primary reason for concern is pregnant females who may transmit the virus to the fetus. Fetal infection can cause brain damage, chorioretinitis and multiple handicaps. Immunosuppressed individuals are also at some risk of acquiring overwhelming infection. However, the majority of infections (>90%) are asymptomatic in both children and adults. If symptoms occur, it is primarily a mononucleosis-like illness with respiratory symptoms and lymphadenopathy. Once infected with the organism, the virus is shed through all body secretions including blood, urine, tears, saliva, semen, and stool. The virus can be shed for months to years. Although the virus may become dormant, there is no indication when reactivation and further viral excretion may occur. Although the antibody developed as a result of infection does not provide immunity, it seems to protect the fetus from damage when born to mothers with recurrent infections. Therefore, if a mother has antibodies to CMV at the start of pregnancy, the chance of having a damaged infant is extremely remote, although the infant may be infected at birth and excrete the virus. The major concern is for women who have not had prior exposure to CMV and have a primary infection during pregnancy. Even if this is the case, only 45 to 50% of those infants are actually infected at birth. Of those 50%, only 10% will have symptomatic disease, from mild to severe affectation. There is currently no indication that gestational age at the time of transmission or differences in the virulence of the viral strain play a significant role in the outcome of congental infection. The overall incidence of CMV infection in infants is approximately 2%; however, as stated above, the vast majority of these children are asymptomatic at birth. Once the child is beyond the neonatal period, acquiring the virus does not cause the same problems and the infection is only significant from the child's ability to transmit the infection to a pregnant female who has not been previously exposed. The diagnosis of CMV infection is made primarily by urine culture for virus. The cost of this culture is approximately $50.00 and is not routinely indicated except for diagnosis of symptomatic congenital CMV infection. It is not a practical way to follow these infants because of the long excretion periods. Antibody titers are not recommended for routine screening as they are present in a large majority of the population and are difficult to interpret.

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*Correspondent: Lynne D. Willett, M.D., Perinatal Center, University of Nebraska Medical Center, 42nd and Dewey, Omaha, NE 68105.

Herpes Simplex Virus

Like CMV, herpes simplex virus has a large prevalence in the population. Some authors estimate that most adults (often more than 90%) have antibodies to herpes type I.[1, 7-8] Herpes type II antibody seropositivity may range from 20-35% in adults with both higher and lower extremes reported in certain communities. Clinically speaking, infections with herpes simplex I and II are indistinguishable and from this point forward we will consider them collectively. It is no longer true that genital infections are all herpes simplex II and oral infections or skin infections in other parts of the body are only herpes simplex I. Herpesvirus may be carried asymptomatically in the respiratory or genital tracts, but is primarily excreted when the typical blisters are weeping and clinically apparent. After these lesions have crusted over, the virus load is significantly diminished and infectivity decreases dramatically. Like all viruses in the herpes family, once an individual is infected the virus becomes dormant but is present throughout life and may reactivate at any time. Although definitely a nuisance and a concern from the socio-epidemiologic standpoint of sexually transmitted disease, the major concern is for neonates who may have systemic infection with devastating results. Several reports of congenital herpes simplex infection have been documented; however, the primary mode of transmission is from an infected genital tract at the time of delivery. The newborn with HSV can have solely cutaneous lesions or disseminated disease involving the central nervous system and/or visceral organs. Death occurs in 15-50% of neonatal disseminated HSV infection, even with antiviral chemotherapy. More than half of survivors have neurologic sequelae.

Some people mistakenly think the herpes simplex lesions apparent on the skin or face in children may be transmitted directly via the blood stream and migrate to the genital tract. This is not true. Most infections are diagnosed by clinical presentation; however, it may also present atypically. In pregnant and reproductive age females, the first infection of genital herpes should be diagnosed by viral culture of the lesions. This is best obtained by scraping the base of the lesion with a cotton swab to obtain cells and placing the swab in viral culture media.

Primary genital infection with herpes simplex is a reportable disease. Again, since most of the public has antibody to herpes, antibody titers are not helpful. Infections are spread by direct contact with the lesions, either on the skin or in the genital tract. Cutaneous herpes simplex lesions should be covered with clothing or bandages, if possible, to minimize direct contact. In addition to the newborn, the only person at significant risk for infections with this virus is the immunocompromised patient.

General Recommendations

Since these two infections are so common and the majority are asymptomatic or of a mild nature, no routine screening for CMV or herpes simplex is advocated for teachers or child caretakers. In addition, screening contacts of children known to have these infections is not indicated. We stress that education in the lay and medical community regarding transmission of all infectious diseases is of prime importance. Personal hygiene is certainly the key to preventing most infections. Specifically, good hand washing technique is of prime importance. We feel that no restriction from school is needed for children with a history of CMV or herpes simplex infections. It is neither cost-effective nor practical to suggest that anyone with cold sores, teachers or students alike should be eliminated from public school on the basis of these lesions.

Viruses can live for a very short period of time under specific conditions on toys and inanimate objects but transmission by this route is very rare. We recommend, when practical, the cleansing with soap and water of washable toys in daycare centers or schools approximately once a week, or when soiled, to minimize the possibility of all infectious diseases, not only viruses.

In general, Rule 55 of the State Department of Health implementing Nebraska Law 79-4133 that covers handling infectious or transmissible diseases in schools, should apply equally well to herpes and CMV. We reiterate this policy:

> Children showing any signs or symptoms of a contagious or infectious disease are required by law to be sent to their homes immediately, or as soon as safe and proper conveyance can be found.
>
> Teachers are encouraged to observe each child carefully for signs of illness each time he returns to school. This is particularly important when epidemic diseases are known to be present in the community.
>
> The presence of one or more of the following signs or symptoms should make the teacher suspect a communicable disease.
>
> fever, flushed face, headache, aches in muscles or joints, unexplained tiredness or listlessness, loss of appetite, stomachache, nausea or vomiting, diarrhea, convulsion, sore throat, nasal congestion or discharge, unexplained skin eruption, sore or inflamed eyes.

Summary

Education of parents, teachers, daycare-center workers, nurses, and physicians is the primary goal and should help alleviate undo concern about these particular agents. Herpes virus and CMV are mildly contagious diseases which are generally spread by direct contact with skin and body fluids. Good personal hygiene and hand washing techniques are emphasized as the key to preventing most infections, especially in centers caring for young children. There is no place for routine screening of personnel for CMV and herpes virus infection since antibody tests are expensive and often misleading in view of the large number of people that have these antibodies present. Finally, there is no reason in most instances to segregate or remove the children with known prior infection from school.

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President's Page

As physicians we have been trained extensively in the treatment of disease. Research and improved technology have made it possible to treat chronic illnesses and sustain life for prolonged periods.

Unfortunately, many of the costly illnesses we treat are the result of an unhealthy lifestyle and poor health habits. Smoking abuse is reported to be responsible for up to 350,000 deaths a year in the United States. Alcohol abuse and drug use add considerably more to the mortality rate through self-inflicted illnesses. We have all witnessed the tragic death, at a relatively early age, and during their productive years, of individuals as a result of heart attacks or lung cancer brought on by destructive health habits. The crippling effects and poor quality of life, sustained by chronic obstructive pulmonary disease sufferers, can be quite dramatic to those who are responsible for their care.

Physicians, a least until very recent years, have had minimal or no training in the encouragement of wellness or fitness programs. The younger physicians are now being subjected to more training in these areas and the residents at the University of Nebraska are to be complimented on establishing a D.O.C. (Doctors Ought to Care) Chapter at the Medical Center. Their purpose is to take a message of good health that is primarily directed at 5th and 6th grade students and aimed at smoking behavior, drug use and abuse, alcohol abuse and health quackery. I would encourage support of the D.O.C. program at the University of Nebraska Medical Center. Associate membership is open and they do have audio-visual materials available to members for their own presentations, at a minimal fee.

Hiram R. Walker, M.D.

There have been several wellness programs instituted by physicians in their practice areas and we certainly need to encourage further development of these programs throughout the state. Our impact is quite minimal when we are treating the end stage of disease. Efforts to concentrate on disease prevention are much more productive and have proven to be much less costly.

Hiram R. Walker, M.D.
President

The Auxiliary

Greetings Auxilians! I would like to thank the Nebraska Medical Association and Auxiliary for the privilege of serving as Auxiliary president for the next year. I would like to thank my family and especially my husband Bob for all of their support. Thanks to all the Auxilians that have agreed to serve on the Board of Directors for next year.

FANTASY ISLAND

Many will be shocked to find,
When the day of judgment nears
There's a special place in Heaven
Set aside for Volunteers

Furnished with recliners
Satin couches, and footstools
When there's no committee chairman
No group leader or car pools

No eager team that needs a coach,
No Bazaar and no bake sale,
There will be nothing to staple
Not one thing to fold or mail.

Telephone lists will be outlawed,
But a finger-snap will bring
Cool drinks and gourmet dinners
And rare treats fit for a King,

You'll ask, who'll serve these privileged few
And work for all they're worth?
Why, those who reaped the benefits
and NOT ONCE volunteered on earth.

The word auxilian could be used in place of volunteer. Auxilians exemplify the highest ideals in volunteerism.

"AUXILIANS IN ACTION" is our theme this year. With that in mind we are preparing a slide show and cassette telling about Nebraska Medical Association Auxiliary members. It will be used in County Auxiliary visits and taken to the AMA Auxiliary Leadership Confluence in September and February. This slide show will be updated each year so if you have pictures of Auxilians in action please send them to us.

We will continue the Health projects we are working on and new ones in coalition with several health agencies.

To support our physician spouses both at home and in the community. We have a big challenge to increase our membership and attempt to be the organization that provides leadership for our new members and retain those that are now members.

The following is a quote from our American Medical Association Auxiliary President Pat Durham, from AMA News May 2, 1986. "I have one overriding mission and that is to spread the word to members that they belong to a very valuable organization with a very proud tradition. The Auxiliary is medicine's No. 1 ally, and we're here to do the things that our physician spouses do not have the time to do. The physician serves the patient, and the Auxiliary serves the physician and the communities in which we live. This is a very positive image, and my No. 1 goal is to see that the Auxiliary receives the credit it deserves for the good that it does. I know that I have grown tremendously through my involvement with the Auxiliary and its members, and I want others to have the same opportunity."

Please join us and see what we have for you!

I am looking forward to visiting with all the County Auxiliaries this fall and also to meet with some of the members at large.

* * *

Our fall Auxiliary meeting will be September 24th at KC's in Fremont. Coffee at 9:30 and program on Volunteerism will be at 10:00 a.m. Lunch will follow and meeting in the afternoon. Diane Hinderliter AMA Auxiliary Director from Rochelle, IL will present the workshop and we will use the Auxiliary in Action slide show.

We are planning a legislative day and workshop in February at our Mid-Winter meeting. More news later.

As our national president says, we should have pride in our membership and encourage others to join and be a part of this very valuable organization.

Bev Krueger

University of Nebraska Medical Center News:

FOUR COLLEGE STUDENTS HAVE SUMMER FELLOWSHIP AT EPPLEY INSTITUTE

Four Nebraska college students are getting the opportunity to work with some of the nation's top cancer researchers this summer.

As a result of a summer fellowship program at the Eppley Institute for Research in Cancer and Allied Diseases at the University of Nebraska Medical Center, the students are filling research posts and working on projects from DNA research to chemotherapeutic drug research.

Michael Barry and Kevin Rahner, both of Omaha, Deborah Ernesti, West Point, Neb., and Becky Fillingham, Lincoln, were selected from 20 applicants for the research posts.

Barry, 21, of 13972 P Street, will be a senior at Nebraska Wesleyan, Lincoln. He is a summer member of the research team of Dr. Allan Eastman and is conducting research with chemotherapeutic drugs. The 1983 Millard South graduate plans to work in chemistry upon graduation from college.

Rahner, 21, of 2623 N. 141st Ave., is working with the research group of Eppley Director Edward Bresnick and conducting studies in DNA. He will be a senior at Peru State College and plans to graduate studies in biochemistry. Rahner is a 1983 graduate of Millard South.

Ms. Fillingham, 21, and originally from Fort Morgan, Colo., will be a senior at the University of Nebraska-Lincoln. She is working with Dr. Solon Rhode in the area of DNA viruses and gene regulation. The 1982 graduate of Perkins County High School, Grant, Neb., plans a career in scientific research.

Ms. Ernesti, 21, will graduate from Wayne State College in December with a bachelor of science in chemistry and mathematics. She plans to pursue graduate work at the University of Arizona. While at Eppley, she is with the research group of Dr. Phillip Issenberg and is conducting analyses of nitroso (cancer-causing) compounds.

This is the second year the Eppley Institute has offered such fellowships.

HOUSE OFFICERS OF THE YEAR NAMED

Two residents at the University of Nebraska Medical Center, Dr. Joseph G. Straley and Dr. Steven J. Davis were recently named as the 1986 House officers of the Year. This year was the first time that two house officers received this award.

Students, house officers and faculty members at the Medical Center selected Dr. Straley and Dr. Davis for this award because of their qualities as a physician, scholar and teacher that are considered an inspiration to students and a source of pride for colleagues, teachers and members of the community.

1986 MEDICAL SCHOOL GRADUATES RECEIVE RESIDENCY APPOINTMENTS

One hundred and forty-nine graduating seniors of the College of Medicine have received residency appointments for post-graduate medical education.

Residencies generally last from one to five years and allow the newly graduated physician to specialize in an area of medicine, such as pediatrics or internal medicine.

Seniors usually list by order of preference several universities or programs for residency appointments. Appointments are then made through the National Resident Matching Program. Most appointments begin the first week of July.

Thirty-four of the College of Medicine students will take their residencies at University of Nebraska affiliated programs in Lincoln and Omaha.

The graduates, listed by appointments, hometowns and specialty areas are:

University of Nebraska Affiliated Hospitals:
ALLIANCE — Gregory M. Koch, family practice
BLAIR — Chauncey Allen Wilkins, family practice
CEDAR RAPIDS — Jo Ann Frank Kinberg, pediatrics
CORDOVA — Sherrill Kay Papik Murphy, internal medicine preliminary
FAIRBURY — Kim ReNee Meyer, internal medicine
FULLERTON — Janice Rae Peterson, internal medicine
HASTINGS — Gwendolyn Jeanne Beck, ENT research

HEBRON — J. Tyler Martin, pediatrics
LINCOLN — Donald Louis Jacobs, surgery; Bruce Steven Kuhn, surgery preliminary; Elizabeth W. Babcock Lau, internal medicine preliminary, anesthesiology; Mario Carlos Mota, pediatrics; John Christian Peterson, internal medicine preliminary; and Mary Elizabeth Yamamoto, pathology
NORTH BEND — Richard Hamilton Legge, internal medicine preliminary
NORTH PLATTE — Mark S. Synovec, pathology
OMAHA — Denise Marie Earl Drvol, pediatrics; Adella Ann Hill, surgery; Timothy R. Malloy, family practice; Jonathan Baker Morgan, surgery preliminary, anesthesiology; Nick Lee Nelson, diagnostic radiology; Stephen John O'Neill, psychiatry; Cynthia Marie Stanislav Wengel, family practice; Steven Philip Wengel, psychiatry; and James Lowell Wisecarver, pathology
PLATTSMOUTH — Michael Howard Peters, internal medicine
SCRIBNER —Mark Grosserode, internal medicine
SPRINGVIEW — Dean Russell Forgey, internal medicine preliminary
TEKAMAH — Mark Wesley Davis, obstetrics and gynecology
LITTLETOWN, COLO. — Frank Rankin Carson, family practice
SIOUX CITY, IOWA — Miles Cornelius Tommeraasen, surgery
TULSA, OKLA. — Anne Kathryn Morse, internal medicine
URBANA, ILL. — Jennifer V. Hubbard Cyr, psychiatry
CANADA — James Tak-Ching Tse, internal medicine

Albert Einstein Medical Center, Northern Division, Philadelphia, Penn.
SIDNEY — Claire Kasupa Higuchi, psychiatry
BROOKLYN, N.Y. — David Sinclair Arnold, psychiatry

Allegheny Family Physicians, Altoona, Penn.
LEXINGTON — Jeffry L. Strohmyer, family practice

Alton Ochsner Medical Foundation, New Orleans, La.
O'NEILL — Lynn Leroy Juracek, surgery

Baylor College of Medicine, Houston, Texas
LINCOLN — Ameeta Montu Bansal, pediatrics
PENDER — Steven Leslie Martin, internal medicine

Baylor University Medical Center, Dallas, Texas
LINCOLN — Mary Louise Fischer, diagnostic radiology

Beth Israel Medical Center, New York, NY
WEST ISLIP, N.Y. — Lani Jeanne Nicholson, internal medicine preliminary

Black Hawk Area Medical Education, Waterloo, Iowa
WILBER — John Alvin Beck, family practice

Broadlawns Medical Center, Des Moines, Iowa
PETERSBURG — Charlotte Anne Wirges, family practice

Case Western Reserve University, Cleveland, Ohio
HASTINGS — Steven Walter Moul, pediatrics

Cedars-Sinai Medical Center, Los Angeles, Calif.
OGALLALA — Gregory Joel Bailey, obstetrics and gynecology

Central Texas Medical Foundation at Brackenridge, Austin, Texas
OMAHA — Darrell Eddie Wilburn, internal medicine

Charity Hospital/Louisiana State University Division, New Orleans, La.
HUMBOLDT — Mylien Thi Vu, obstetrics and gynecology

Charlotte Memorial Hospital and Medical Center, Charlotte, NC
COLUMBUS — Mark D. Baxa, emergency medicine

Creighton University Affiliated Hospitals
OMAHA — Harris Alan Frankel, internal medicine preliminary; Michael Lee Goldstein, internal medicine preliminary; and Stephen Lee Hosman, pediatrics
AURORA, ILL. — Robert James Witte, internal medicine preliminary
RUMANIA — Miriam Feifel Seelig, internal medicine

Duke University Medical Center, Durham, NC
OMAHA — Robert Michael Cassman, pathology

Edward W. Sparrow Hospital, Lansing, Mich.
MILFORD — David George Curtis, transitional

Fox Valley Family Medical Program, Appleton, Wisc.
LINCOLN — Timothy Heller Fischer, family practice

Good Samaritan Hospital, Portland, Ore.
SCOTTSBLUFF — Diana Lynn Bennett Habrich, internal medicine preliminary

Grand Medical Center, Columbus, Ohio
WEST NEWTON, MASS. — Elaine Norma Tomlinson, family practice

Hennepin County Medical Center, Minneapolis, Minn.
WAHOO — Solveig Ann Hansen, family practice

Indiana University Medical Center, Indianapolis, Ind.
CASPER, WYO. — John Shannon Swan, diagnostic radiology

Iowa Methodist Medical Center, Des Moines, Iowa
OMAHA — Geri Ann Doran, internal medicine preliminary

Lemuel Shattuck Hospital, Jamaica Plain, Mass.
OMAHA — Jose Alberto Saporta, transitional

Lincoln Medical Education Foundation, Lincoln, NE
DONIPHAN — Timothy Joseph Sullivan, family practice
GRAND ISLAND — Michael Joseph McGahan, family practice
SCHUYLER — Marjorie Jo Scheuneman Mellor, family practice
ST. EDWARD — Scott Douglas Green, family practice
SANDY, UTAH — David Adrian Running, family practice

Los Angeles County — University of Southern California Medical Center, Los Angeles, Calif.
PASADENA, CALIF. — Eric McCloud, pediatrics

Martin Lutheran King Jr. Hospital, Los Angeles, Calif.
MEMPHIS, TENN. — Vanessa McKenzie, internal medicine preliminary

Mayo Graduate School of Medicine, Rochester, Minn.
LINCOLN — Anne Catherine Hinshaw Stephen, pediatrics
OMAHA — Mark Gerard Franco, orthopedic surgery
SUTTON — Mark Anthony Parrella, internal medicine
AURORA, COLO. — Ethan Robert Cary, internal medicine

Medical College of Wisconsin, Milwaukee, Wisc.
ATKINSON — Todd Joseph Troshynski, pediatrics
LINCOLN — Jeffrey David Matthes, psychiatry

Methodist Medical Center of Illinois, Peoria, Ill.
ROGERS — Craig Vince Svoboda, family practice

Montefiore Hospital, Pittsburgh, Penn.
OMAHA — John Frederick Angle, transitional

Naval Hospital, Oakland, Calif.
BEATRICE — Harold Robert Huff, surgery
OMAHA — Gary Joseph Gustafson, internal medicine

North Carolina Memorial Hospital, Chapel Hill, NC
OMAHA — Catharine Suzanne Davis, pediatrics

Northwestern University Medical School, Chicago, Ill.
BEATRICE — Rodney W. Dodge, emergency medicine
OMAHA — Jeffrey Robert Binder, internal medicine preliminary

Oklahoma Memorial Hospital, Oklahoma City, Okla.
OMAHA — Steven Donald Coupens, orthopedic surgery

Oregon Health Sciences University, Portland, Ore.
ALLIANCE — James Henry Olson, internal medicine

Polyclinic Medical Center, Harrisburg, Penn.
DEXTER, N.M. — Julian Gutierrez, surgery preliminary

Presbyterian — St. Luke's Hospital, Denver, Colo.
BEATRICE — Wesley Keith Hubka, transitional
OMAHA — Michael Dwane Finn, transitional
COUNCIL BLUFFS, IOWA — John Anton Beneke, transitional

Presbyterian — University of Pennsylvania Medical Center, Philadelphia, Penn.
OMAHA — Valerie Ann Arkoosh, transitional

Saginaw Cooperative Hospitals, Saginaw, Mich.
BEATRICE — Craig B. Tubbs, family practice

Self Memorial Hospital, Greenwood, SC
MINDEN — Peter Christopher Meyer, family practice

Shands Hospital, Gainesville, Fla.
LINCOLN — Nanci Ann Ruyle, pediatrics
YORK — Scott Schafer James, pediatrics

Sioux Falls Family Practice Program, Sioux Falls, SD
WOOD RIVER — Charles W. Shafer, family practice

Siouxland Medical Education Foundation, Sioux City, Iowa
GRAND ISLAND — Larry Lamont Hansen, family practice

Southwestern Michigan Area Health Education Program, Kalamazoo, Mich.
FREMONT — Joleen Wiener, transitional
HEMINGFORD — Mary Patricia Wilkins, surgery preliminary
OMAHA — Jack Blair Wagoner, surgery preliminary

St. Francis Hospital, Evanston, Ill.
OMAHA — Barry Elliott Epstein, transitional

St. Francis Regional Medical Center, Wichita, Kan.
OMAHA — William Stuart Singer, orthopedic surgery

St. Mary's Hospital and Medical Center, Madison, Wisc.
LINCOLN — Jane Marshall Pemberton, family practice

St. Joseph's Hospital, Denver, Colo.
ELWOOD — Michael Jay Phillips, surgery preliminary
OMAHA — Timothy Duane Loker, surgery preliminary

St. Joseph's Hospital, Flint, Mich.
ELKHORN — Michael David Driscoll, family practice

St. Vincent's Hospital, New York, NY
FALLS CITY — Douglas Edward Cowan, transitional

Stamford Hospital, Stamford, Conn.
AURORA, COLO. — Scott Downing Woodard, surgery

Texas Tech University Health Science Center, El Paso, Texas
GARDEN GROVE, CALIF. — Jaime Arturo Foland, internal medicine

UCLA Medical Center, Los Angeles, Calif.
OMAHA — Jeremy Scott Garnett, pediatrics; and David Howard Stern, family practice

United States Air Force Medical Center (Wright-Patterson), Dayton, Ohio
OMAHA — Steven Michael Stolz, pediatrics

University of Alabama Medical Center, Birmingham, Ala.
OMAHA — Daniel Carl Dahl, surgery

University of Arkansas for Medical Sciences, Little Rock, Ark.
FREMONT — John Howard Shelso, pediatrics
OMAHA — Craig William Walker, diagnostic radiology

University of California (Davis) Affiliated Hospitals, Sacramento, Calif.
SAN DIEGO, CALIF. — J. David Hurtado, family practice

University of California (Irvine) Medical Center, Orange, Calif.
OMAHA — Jeffrey Craig Glass, combination medicine/psychiatry

Univeristy of California (San Diego) Program, San Diego, Calif.
OMAHA — Cynthia Mary Yeates Olson, pediatrics

University of California (San Francisco), Fresno, Calif.
MONTE SERENO, CALIF. — Catherine Josephine Horine Hutfless, psychiatry

University of Colorado Program, Ft. Collins, Colo.
LINDSEY — Lyle Mark Pfeifer, family practice

University of Illinois Medical Center, Chicago, Ill.
ST. PAUL — James Nicholas Arterourn, internal medicine
RIVERSIDE, ILL. — Mary Lenora Disis, internal medicine

University of Iowa Affiliated Hospitals, Iowa City, Iowa
PIERCE — Brenda Ann Bucklin, internal medicine

Univeristy of Iowa Hospital and Clinics, Iowa City, Iowa
PAPILLION — Mark William Mulkey, surgery
PLATTSMOUTH — Stephen Ralph Russell, pediatrics

University of Kansas Medical Center, Kansas City, Kan.
HENDERSON — Stephen Thomas Steiner, internal medicine
OMAHA — Sharon Ann Foley, internal medicine

University of Kansas (Wichita) Program, Wichita, Kan.
NELSON — Daniel Edward Mazour, family practice
SUTHERLAND — Paul Marshall Grow, family practice
TABLE ROCK — Linda Sue Gottula Mazour, family practice

University of Michigan Hospitals, Ann Arbor, Mich.
COLUMBUS — John Michael Justice, internal medicine

University of Minnesota Hospital and Clinics, Minneapolis, Minn.
OMAHA — Cynthia M. Schmidt, pathology
SPARKS, NEV. — John Kvasnicka, internal medicine

University of Mississippi Medical Center, Jackson, Miss.
NEW BRITAIN, CONN. — Monica Willis, family practice

University of Missouri/Kansas City School of Medicine, Kansas City, MO
LINCOLN — John Robert Lohrberg, family practice; and Mark Andrew Nielsen, internal medicine
OMAHA — Francis Patrick McCormick, internal medicine
ST. LOUIS, MO. — James Herman McDonald, combination medicine/pediatrics

University of Oklahoma Health Sciences Center, Oklahoma City, Okla.
OMAHA — Matthew A. Murray, pediatrics

University of South Dakota Affiliated Hospitals, Sioux Falls, SD
AURORA — Jay Dudley Crowder, internal medicine

University of Texas Health Sciences Center, San Antonio, Texas
HASTINGS — Janet Catherine Welch, diagnostic radiology

University of Texas Medicine Branch Hospitals, Galveston, Texas
BELLEVUE — Francis Michael Crnkovich, diagnostic radiology

University of Texas Southwest Medical School, Dallas, Texas
OMAHA — Bret Henry Hesseltine, anesthesiology
RAPID CITY, S.D. — Rand Lee Schleusener, orthopedic surgery

University of Washington Affiliated Hospitals, Seattle, Wash.
OMAHA — Michael James Menolascino, internal medicine preliminary

University of Washington Medical Center, Seattle, Wash.
GENEVA — Bradford Allen Brabec, pediatrics
LINCOLN — Kelly Ann McGinnis, internal medicine preliminary

University of Wyoming Program, Casper, Wyo.
FULLERTON — Timothy John Maly, family practice

Veterans Administration Medical Center, Des Moines, Iowa
OMAHA — Christopher Graeflin Olson, surgery preliminary

Wheeling Hospital, Wheeling, W. Va.
PLATTSMOUTH — Craig Robert Bardell, family practice

Wyman Park Health Systems, Baltimore, Md.
WASHINGTON, D.C. — Sylvia Renee Medley, internal medicine

In Memoriam

By medicine life may be prolong'd
yet death
Will seize the doctor too.
—Shakespeare

Robert W. Taylor, M.D. (Born October 2, 1897 — died June 17, 1986) — Medical Specialty — Ophthalmology. Doctor Taylor was a graduate of Baylor University College of Medicine in Houston, Texas in 1927 and practiced in Beatrice, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Louis M.; several nieces and nephews. Doctor Taylor was preceded in death by his first wife, Gladys.

Robert H. Scherer, M.D. (Born September 6, 1923 - died June 9, 1986) — Medical Specialty — General Practice. Doctor Scherer was a 1947 graduate of the University of Nebraska College of Medicine and practiced in West Point, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Maria; daughters Susan Jones of Omaha, Jane Chilcoat and Robin Scherer, both of Lincoln; brother Max Scherer of Lincoln; and two grandchildren.

John P. Gilligan, M.D. (Born August 4, 1898 - died June 29, 1986) — Medical Specialty — General Surgery. Doctor Gilligan was a graduate of the University of Nebraska College of Medicine in 1925 and practiced in Nebraska City, Nebraska. He was a member of the Nebraska Medical Association and the American Medical Association. Survivors include his wife, Corinne; sons John P. Jr. of Los Angeles, James F. of Cambridge, Mass., and Michael G. of Garrison, N.Y.; a brother, Bennett Gilligan of Gretna; and a sister, Miriam Riddell of Scottsbluff.

Welcome New Members

Roddy L. Wilson, D.O.
4009 Avenue B, #3
Scottsbluff, NE 69361

Mark D. Jobman, M.D.
1408 - 5th
Aurora, NE 68818

Steven M. Denenberg, M.D.
7640 Pacific St.
Omaha, NE 68114

Warren T. Kable, M.D.
601 N. 30th St., #4810
Omaha, NE 68131

Don D. Bailey, M.D. (Reinstated)
O'Neill
Nebraska 68763

Keith W. Vrbicky, M.D.
109 No. 29th
Norfolk, NE 68701

James T. Cassidy, M.D.
601 N. 39th, #6820
Omaha, NE 68131

Coming Meetings

1986 FALL SESSION — Sept. 25-27 — Lincoln Cornhusker.

UNIVERSITY OF NEBRASKA

GENETIC SCREENING IN THE WORKPLACE — Sept. 8 sponsored by the Office of Gov. Robert Kerrey and the University of Nebraska Medical Center. On various issues surrounding the question of whether employees should be genetically screened for their possible reactions to toxic substances to which they may be exposed at their jobs. No fee.

ADVANCED TRAUMA LIFE SUPPORT — September 15-16, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

EMERGENCY MEDICINE REVIEW — Sept. 22-27 or Oct. 6-11, 1986. Course will provide physicians engaged in the evaluation and treatment of urgent and life threatening conditions with an in-depth review of emergency medicine. Designed for physicians involved in full-time Emergency Medicine and those seeking certification in Emergency as well as primary care physicians who cover Emergency Rooms on a part-time basis. 45 hours of ACEP Category I credit, as well as 45 prescribed hours by the American Academy of Family Physicians and AMA Category I. Fee: $475 if postmarked by July 31, $550 if postmarked after July 31. For more information contact: Marge Adey, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telephone (402) 559-4152.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Cocktail Reception - Tuesday, September 30, 1986, 5:30 to 7:00 p.m. - Washington Hilton Hotel, Washington, D.C. - in conjunction with the American Academy of Family Physicians meeting. All alumni, spouses and friends are invited. Hors D'oeurves and Cash Bar.

INFECTIOUS DISEASE SYMPOSIUM — Friday, October 24, 1986 at the Omaha Marriott Hotel, Omaha, Nebraska. Sponsored by the University of Nebraska Medical Center, Division of Immunology and Allergy and the Nebraska Chapter of the American Academy of Pediatrics. Credit: 5 Prescribed Hours of AAFP, 5 AMA Category I. Fee: TBA. For more information contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebraska 68105, Phone: (402) 559-4152.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Roundup and Reception in Omaha, Monday, October 27, 1986, 6:00 - 7:30 p.m., Red Lion Inn Ballroom; in conjunction with the Omaha Mid-West Clinical Society Postgraduate Assembly. Hors D'oeuvres and Cash Bar. All alumni, spouses, façulty and friends are cordially invited. Followed at 7:45 p.m. with a 50-year Dinner, Nebraska Room, Red Lion Inn. Class reunions will be held in Omaha in late October for classes ending in "6" and "1".

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

33RD ANNUAL SCIENTIFIC MEETING - NEBRASKA OB-GYN SOCIETY — December 4, 5, 6, 1986 at the MGM Grand Hotel, Las Vegas, Nevada. 9 Hours Credit. Fee: $200. Contact: Dennis Beavers, M.D., 720 N. 87th Street, Omaha, Nebraska 68114, (402) 390-1200.

7TH ANNUAL MEDICAL & SKI CONFERENCE — "Diagnostic Dilemmas: The Approch and the Answers" — February 15-19, 1987 at the Keystone Conference Center, Keystone, Colorado. Sponsored by the Univeristy of Nebraska College of Medicine Department of Internal Medicine. Program is being offered to physicians at the same time that the College of Nursing is offering a nursing ski conference and the College of Dentistry will be offering their annual Dental Ski Conference. Approved for 16 hours of AMA Category I and AAFP prescribed hours. For more information contact Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telphone (402) 559-4152.

36TH ANNUAL OB-GYN CONFERENCE — March 12-13, 1987 at the Holiday Inn Central, Omaha, Nebraska. Fee: TBA. Contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, Omaha, Nebraska 68105. (402) 559-4152.

FAMILY PRACTICE REVIEW - A COMPREHENSIVE UPDATE — March 30-April 10, 1987 and April 27-May 8, 1987 at Omaha, Nebraska. Sponsored by the University of Nebraska College of Medicine. Registration Fee: $850. (One week registration available with special arrangements). Contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebrask 68105. Phone: (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

LANCASTER COUNTY MEDICAL SOCIETY

"CLINICAL UPDATE - II—November 8, 1986 (Saturday), Villager Convention Center, 5200 "O" St. - Lincoln, NE. This "Clinical Update - II" will be a continuing medical education program designed to address and update the care of patient health care problems presenting in primary care M.D. offices on a day-to-day basis. It is anticipated that the program will be reviewed and accepted for 6 prescribed hours by the American Academy of Family Practice. As an organization accredited for continuing medical education, the medical education committee - Lancaster County Medical Society designates this continuing medical education activity as meeting the criteria for 6 credit hours in category I of the Physicians Recognition Award of the American Medical Association. Contact: P. D. Duensing, Ed.D. - Executive Secretary, Lancaster County Medical Society, (402) 474-2405.

NEBRASKA METHODIST HOSPITAL

ANNUAL HOWARD B. HUNT CANCER SEMINAR: ENVIRONMENT AND CANCER, UPDATE ON AIDS, LASER THERAPY FOR CANCER — October 10, 1986 - all day seminar - Nebraska Methodist Hospital - 8303 Dodge Street - Omaha, Nebraska 68114 - No registration fee - For further information call - 402-390-4035.

CREIGHTON UNIVERSITY

IMAGE GUIDED PERCUTANEOUS FINE NEEDLE ASPIRATION BIOPSY — Sept. 6 Holiday Inn Central, Omaha, Nebraska. Hours - 3. Fee $75.

CARDIOLOGY/RHEUMATOLOGY UPDATE — Sept. 18-30. Ireland Study/Tour in cooperation with Trinity College and University College, Dublin; co-sponsored with University of Wisconsin and Tulane Medical Center. Hours 36. Fee $400.

A DAY WITH THE PERINATOLOGISTS — Sept. 20. Marriott Hotel, Omaha, Nebraska. Hours 7. Fee $100.

MEDICINE UPDATE — Oct. 10-12 at Saint Joseph Hospital, Omaha, Nebraska. Hours TBA. Fee TBA.

OMAHA MID-WEST CLINCIAL SOCIETY — Oct. 27-29 at the Red Lion Inn, Omaha, Nebraska. Hours 23. Fee TBA.

1987

CORONARY HEART DISEASE AND HYPERTENSION — Feb. 1-6. Freeport, Bahamas. Hours 28. Fee $375 prior to Nov. 1; $450 after Nov. 1.

PATHOLOGY AND TREATMENT OF ESPPHAGEAL DISORDERS — Feb. 12-17 at Windham Rose Hall Beach Hotel, Montego Bay, Jamaica. Hours 24. Fee $475.

ADVANCES IN ANTITHROMBOTIC THERAPY — Mar. 14 at Saint Joseph Hospital, Omaha, Nebraska. Hours TBA. Fee TBA.

FLORIDA TUTORIAL — March 25-27 at the Orlando Airport Marriott, Orlando, Florida. Hours TBA. Fee TBA.

For more information on these programs contact Creighton University School of Medicine, Continuing Medical Education, Omaha, Nebraska. Toll Free - 800-228-7212 ext. 2550 or 402-280-2550.

NATIONAL JEWISH CENTER FOR IMMUNOLOGY AND RESPIRATORY MEDICINE

TRIBUTE TO HYMAN CHAI, M.D. — January 10-14. National Jewish Center for Immunology and Respiratory Medicine Keystone Summit at Keystone, Colorado. Topics: Allergy, Asthma, Pharmacology, Advances in Immunology, Diagnostic Testing and more. Fee: $325. $165 for Allied Health and Physicians in Training. 15.5 hours of AMA Category 1 Credit. For more information contact: Jeri Wagner, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206. 303-398-1000.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical

Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

MEDICINE AND RELIGION: ETHICS OF SEXUALITY AND REPRODUCTION — October 21-22, 1986. Sponsored by the University of Kansas Medical Center. Location Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas 66103. Credit: AMA Cat 1, AAFP, SW, CNE. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480

EMERGENCY RESPIRATORY CARE — October 24-25, 1986. Sponsored by the University of Kansas Medical Center. Location: Doubletree Hotel, Overland Park, KS. Credit: AMA Cat 1, CME, AART, CRNA, CNE, MICT, PT. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

AMERICAN CANCER SOCIETY: PEDIATRIC ONCOLOGY SYMPOSIUM — October 17, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103 and the American Cancer Society - Kansas Division, Inc. Credit: AMA Cat 1, AAFP, CNE, SW, PT. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

SCHEDULED MEETINGS

54TH ANNUAL POSTGRADUATE ASSEMBLY — Omaha Mid-West Clinical Society, October 27, 28 and 29, 1986 at The Red Lion Inn/Omaha. For information, please contact: Miss Lorraine E. Seibel, Executive Secretary, Omaha Mid-West Clinical Society, 7363 Pacific Street, #205-B, Omaha, Nebraska 68114.

AMA News Notes

(Continued from page 7A)

"Your Board of Trustees recommends that the AMA. . .call on physicians to renew their commitment to report professional misconduct. . .to expand and improve its data bank so that credentials and practice histories can be verified more quickly and effectively.

"This is medicine taking charge, cleaning its hourse, becoming effective. In the coming year I will ask all physicians to help me carry this flag," Dr. Coury said.

* * *

In an effort to increase membership benefits, and to boost nondues revenue, the AMA has reached an agreement to acquire PRO Services Inc. (PRO), a mutual fund management company headquartered in Blue Bell, Pa. The purchase is subject to approval by the shareholders of the mutual funds managed by PRO. A special meeting of hte shareholders for this purpose is scheduled for July.

"The AMA is pleased with its ability to produce a profit center for the association through the purchase," said James H. Sammons, MD, AMA executive vice presient, who added, "We have tried to find non-dues revenue, because that takes the pressure off of the dues payers."

Should the purchase go forward as planned, the AMA plans to rename PRO AMA Advisers Inc. Plans call for a marketing program that would target AMA members as potential investors in the funds. Because of the length of time needed both for shareholder approval of the transaction and for the development of a marketing plan, Dr. Sammons does not expect PRO to contribute much revenue to the AMA in 1986. From 1987 on, however, "the cash flow will depend on the level of participation of physicians and others who buy into the funds," he said.

"We have bought PRO on a long-term basis, primarily to provide an opportunity for our members. But we expect some cash flow beginning next year," Dr. Sammons said.

* * *

The Participating Physician Program "has been fraught with problems since its inception" and should be ended along with the fee freeze on non-participating physicians, AMA trustee Jerald R. Schenken, M.D., told the House Commerce health subcommittee July 16. The subcommittee is likely to follow the House Ways and Means panel's lead in physician payment changes and may attach several cost-adding provisions. These include Medicare coverage of some optometric services, funds for research on variations in medical practice, and expanded appeal rights for Medicare Part B.

* * *

Effective Oct. 1, 1986, State Medicaid Agencies will be required to exclusively use and accept the AMA-developed standard health insurance claim form called: Standard Form HCFA 1500.

A product of extensive AMA efforts, the form is already required by Medicare, and has been adopted for use by the Civilian Health and Medical Program of the Uniformed Services, the U.S. Dept. of Labor, and by many private insurance companies.

The AMA has several high-quality, reasonably priced versions of the form available. Prices per carton of 1,000 are: single sheets, $34.10; two-part snap-out $49.50; and two-part continuous for computer printers, $51.75. All shipping and handling charges are included in the price, and bulk orders are discounted. AMA members receive a 10% discount. Inquiries and orders should be sent to: AMA Insurance Form, Book and Pamphlet Fulfillment, c/o AMA, P.O. Box 10946, Chicago, Ill. 60610. VISA and MasterCard orders may be made by calling 1-800-621-8335, or in Illinois, call (312) 645-4987 collect.

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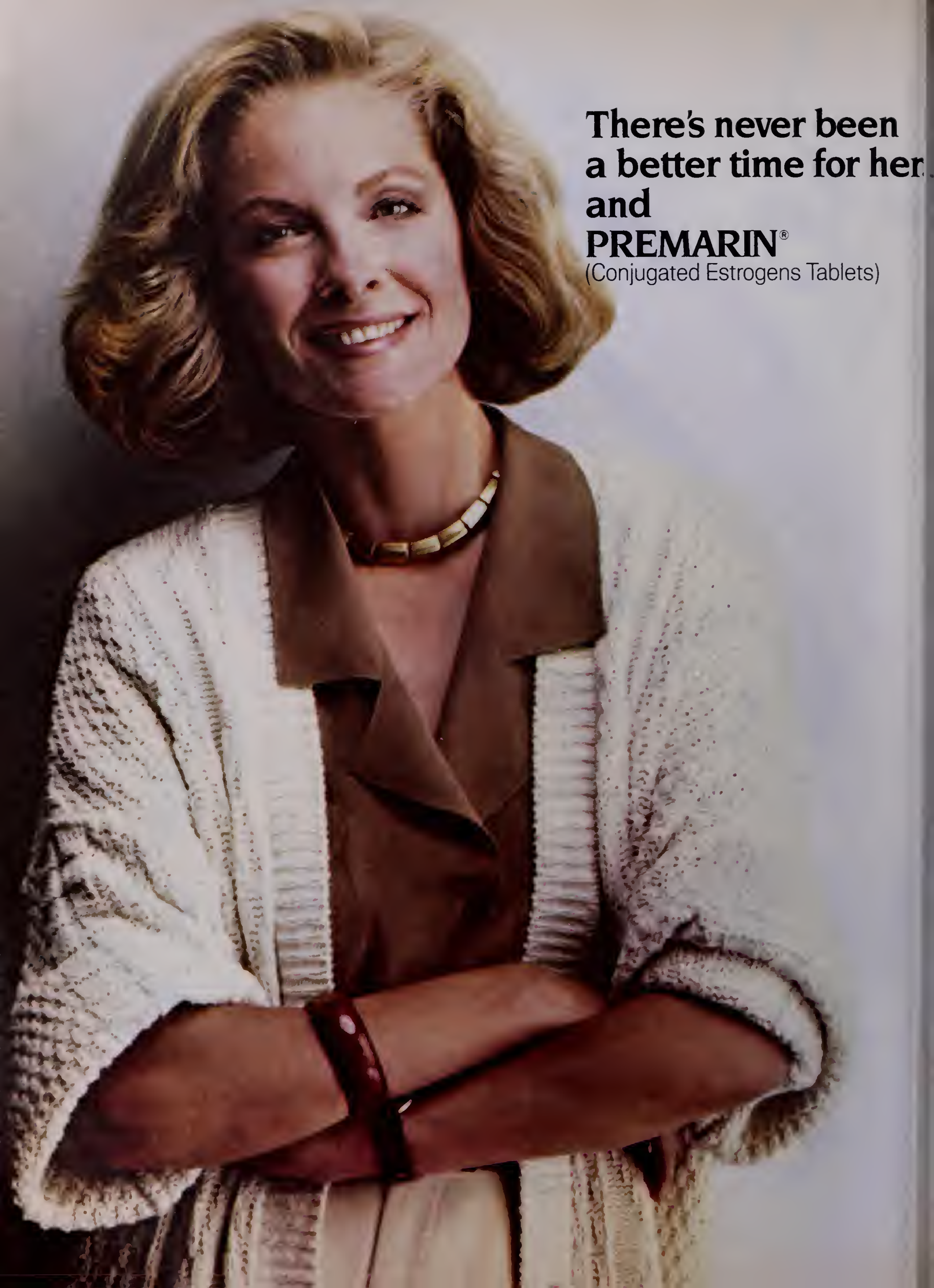
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Now the evidence looks better than ever

Significantly reduced risk of endometrial hyperplasia

Endometrial hyperplasia was significantly reduced when progestin was added to PREMARIN therapy for more than ten days a month.[1-4] The risk of endometrial hyperplasia may also be reduced through cyclic administration of unopposed, low-dose PREMARIN.

Effect on lipids—an important feature

PREMARIN used alone does not adversely affect lipid levels. In fact, a clinical study has shown a significant increase in HDL cholesterol—from 49.7 mg/dL to 56.4 mg/dL—and decrease in LDL cholesterol—from 165.1 mg/dL to 138.1 mg/dL—after one year of therapy with PREMARIN, 0.625 mg.[5]

Low-dose control of menopausal symptoms*

PREMARIN effectively relieves vasomotor symptoms, such as hot flashes. When estrogen deficiency is limited to atrophic vaginitis, PREMARIN® (conjugated estrogens) Vaginal Cream restores the vaginal environment to its premenopausal state.

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*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary of prescribing information.

For moderate-to-severe vasomotor symptoms

PREMARIN®

(Conjugated Estrogens Tablets)

0.3 mg 0.625 mg 0.9 mg 1.25 mg 2.5 mg

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For atrophic vaginitis

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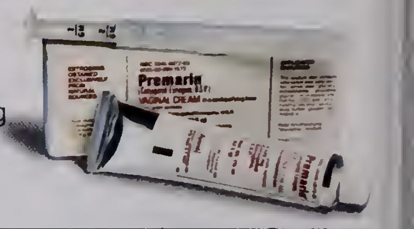

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

> 1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA
>
> Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.
>
> 2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.
>
> The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0 9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0 625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease 2 Known or suspected estrogen-dependent neoplasia 3 Known or suspected pregnancy (See Boxed Warning). 4 Undiagnosed abnormal genital bleeding 5 Active thrombophlebitis or thromboembolic disorders 6 A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogen per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase th risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis When doses of this size ar used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estroger containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause an blood pressure should be monitored with estrogen use A worsening of glucose tolerance has been observed patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefull observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to th initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer tha one year without another physical examination being performed. Conditions influenced by fluid retention such a asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients ma develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleedin mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the ris of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increase incidence of mental depression Patients with a history of depression should be carefully observed. Preexistin uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estroge therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, th medication should be discontinued while the cause is investigated. Estrogens should be used with care in patien with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or young patients in whom bone growth is not complete If concomitant progestin therapy is used, potential ris may include adverse effects on carbohydrate and lipid metabolism

The following changes may be expected with larger doses of estrogen.

a. Increased sulfobromophthalein retention

b Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased no epinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, measured by PBI, T4 by column, or T4 by radioimmunoassay Free T3 resin uptake is decreased, reflecting t elevated TBG; free T4 concentration is unaltered.

d Impaired glucose tolerance

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration As a general principle, the administration any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in hum milk

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptive breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrom amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secret (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma wh may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption loss scalp hair; hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migrai dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggra tion of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrop vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose t will control symptoms should be chosen and medication should be discontinued as promptly as possib Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or ta medication should be made at three- to six-month intervals

2 *Given cyclically:* Female castration. Osteoporosis. Female castration—1 25 mg daily, cyclically Adj upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level t will provide effective control. Osteoporosis —0.625 mg daily Administration should be cyclic (eg, three we on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measu taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae

The lowest dose that will control symptoms should be chosen and medication should be discontinued promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer a appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurr abnormal vaginal bleeding

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305 1599-1605 **2.** Paterson MEL, Wa Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in climacteric *Br Med J* 1980;280:822-824 **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women *Ob Gynecol* 1985; 67: 496-499 **4.** Whitehead MI, Lane G, Siddle N, et al Avoidance of endometrial hyperstimula in estrogen-treated postmenopausal women *Semin Reprod Endocrinol* 1983,1 1,41-52 **5.** Barnes RB, Roy Lobo RA Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogester acetate treatment in postmenopausal women *Obstet Gynecol* 1985;66 216-219

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National Society to Prevent Blindness, Nebraska Affiliate
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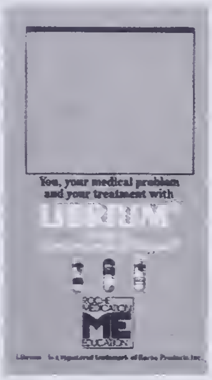
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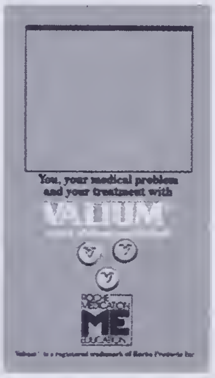
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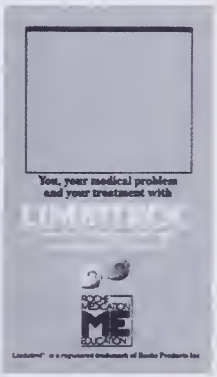
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THE NEBRASKA MEDICAL JOURNAL

118 Years

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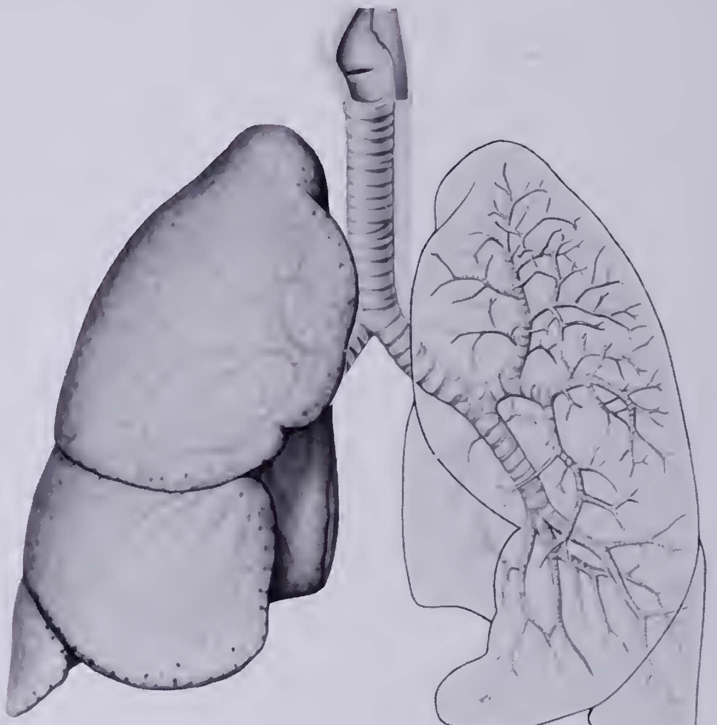

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offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary **Consult the package literature for prescribing information**

Indications and Usage Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions *General Precautions* – If an allergic reaction to Ceclor® (cefaclor, Lilly) occurs, the drug should be discontinued and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy – *Pregnancy Category B* – Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor® (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers – Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children – Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain – Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic – Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic – Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal – Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782]

Note: Ceclor® (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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J-6138 January 1986

Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do pericdic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: 'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.

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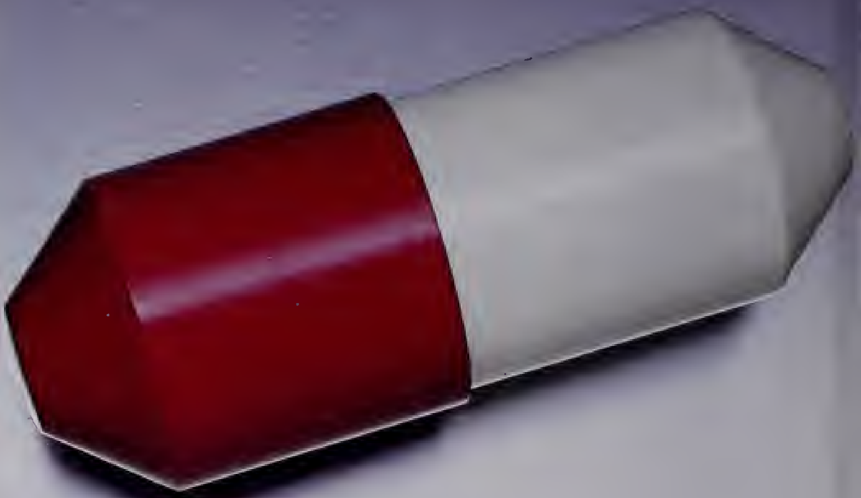

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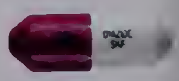

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Address all correspondence relating to subscriptions, advertising or address changes to Mr. Ken Neff, Business Manager, 1512 FirsTier Bank Building, Lincoln, Nebraska 68508. Phone (402) 474-4472.

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CONFIRMED BY CLINICAL EVIDENCE

ZANTAC® 150 h.s.

ranitidine HCl/Glaxo 150 mg tablets

EFFECTIVE MAINTENANCE THERAPY

for healed duodenal ulcer patients

CONFIRMED

In two randomized, double-blind, and well-controlled clinical trials, ZANTAC 150 mg h.s. significantly superior to cimetidine 400 mg h.s. for maintenance therapy in healed duodenal ulcers.

Percent of patients with observed duodenal ulcer recurrence

		0-4 months	0-8 months	0-12 months	No. patients
USA[1]	ranitidine 150 mg h.s.	9%	14%*	16%†	60
	cimetidine 400 mg h.s.	23%	34%	43%	66
UK, Ireland, Australia[2]	ranitidine 150 mg h.s.	8%‡	14%‡	23%‡	243
	cimetidine 400 mg h.s.	21%	34%	37%	241

*$p=0.02$
†$p=0.01$
‡$p \le 0.004$
%=life-table estimates
All patients were permitted prn antacids for relief of pain.

These two trials used the currently recommended dosing regimen of cimetidine (400 mg h.s.) and ranitidine (150 mg h.s.). A comparison of other dosing regimens has not been studied.

The studied dosing regimens are not equivalent with respect to the degree and duration of acid suppression or suppression of nocturnal acid.

The superiority of ranitidine over cimetidine in these trials indicates that the dosing regimen currently recommended for cimetidine is less likely to be as successful in maintenance therapy.

Convenient once-a-night dose with a low incidence of side effects[3]

Headache, sometimes severe, seems to be related to ranitidine administration. Other side effects have been reported; for a complete listing, see the ADVERSE REACTIONS section in the Brief Summary.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 150 mg has no significant drug interactions with theophylline, phenytoin, or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications that decrease gastric acidity are administered.

Zantac® 150
ranitidine HCl/Glaxo *150 mg tablets*

One tablet at bedtime
for maintenance

See next page for references and
Brief Summary of Product Information.

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Zantac® 150

ranitidine HCl/Glaxo 150 mg tablets

One tablet at bedtime for maintenance therapy in healed duodenal ulcer patients

References:

1. Silvis SE, Griffin J, Hardin R, et al: Final report on the United States multicenter trial comparing ranitidine to cimetidine as maintenance therapy following healing of duodenal ulcer. *J Clin Gastroenterol* 1985;7(6):482-487.
2. Gough KR, Korman MG, Bardhan KD, et al: Ranitidine and cimetidine in prevention of duodenal ulcer relapse: A double-blind, randomised, multicentre, comparative trial. *Lancet* 1984;ii:659-662.
3. Data available on request, Glaxo Inc.

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer**. Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy. 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day.

Ranitidine was not mutagenic in standard bacterial tests (*Salmonella*, *E coli*) for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: *Teratogenic Effects: Pregnancy Category B:* Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk. Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups. The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as events in clinical trials or in the routine management of patients treated with oral ZANTAC®. The relationship to ZANTAC therapy has been unclear in many cases. Headache, sometimes severe, seems to be related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and premature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, and abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to at least twice the pretreatment levels in 6 of 12 subjects receiving 100 mg qid IV for seven days, and in 4 of 24 subjects receiving 50 mg qid IV for five days. With oral administration there have been occasional reports of reversible hepatitis, hepatocellular or hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granulocytopenia, thrombocytopenia, and pancytopenia.

Endocrine: Controlled studies in animals and man have shown no stimulation of any pituitary hormone by ZANTAC and no antiandrogenic activity, and cimetidine-induced gynecomastia and impotence in hypersecretory patients have resolved when ZANTAC has been substituted. However, occasional cases of gynecomastia, impotence, and loss of libido have been reported in male patients receiving ZANTAC, but the incidence did not differ from that in the general population.

Integumental: Rash, including rare cases suggestive of mild erythema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospasm, fever, rash, eosinophilia) and small increases in serum creatinine.

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The current recommended adult oral dosage is 150 mg twice daily. An alternate dosage of 300 mg once daily at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosage is 150 mg at bedtime.

Pathological Hypersecretory Conditions (such as Zollinger-Ellison Syndrome): The current recommended adult oral dosage is 150 mg twice a day. In some patients it may be necessary to administer ZANTAC® 150-mg doses more frequently. Doses should be adjusted to individual patient needs, and should continue as long as clinically indicated. Doses up to 6 g/day have been employed in patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosage is 150 mg twice a day.

GERD: The current recommended adult oral dosage is 150 mg twice a day.

See full prescribing information for dosage adjustment for patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochloride equivalent to 300 mg of ranitidine) are yellow, capsule-shaped tablets embossed with "ZANTAC 300" on one side and "Glaxo" on the other. They are available in bottles of 30 (NDC 0173-0393-40) and unit dose packs of 100 tablets (NDC 0173-0393-47).

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent to 150 mg of ranitidine) are white tablets embossed with "ZANTAC 150" on one side and "Glaxo" on the other. They are available in bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs of 100 tablets (NDC 0173-0344-47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Protect from light. Replace cap securely after each opening.

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AMA News Notes

The AMA joined other groups in August in renewing calls for an airline ban on smoking. At a press conference in Washington, D.C., Robert E. McAfee, M.D., AMA trustee, said the AMA already has begun working on legislation to ban smoking aboard domestic flights that will be presented early next year. Others present included representatives from the American Heart Assn., American Lung Assn., American Cancer Society, the Consumer Federation of America and Action on Smoking and Health.

The groups spoke on behalf of a report from the National Academy of Sciences on airline cabin air quality that included a smoking ban recommendation. Medical scientists said that nicotine was a small part of the problem, pointing out that tar and other smoke constituents in recirculated cabin air constituted the principal problem.

James H. Sammons, M.D., AMA executive vice president, participated in the Public/Private Sector Advisory Committee on Catastrophic illness convened by HHS Secretary Otis R. Bowen, M.D.

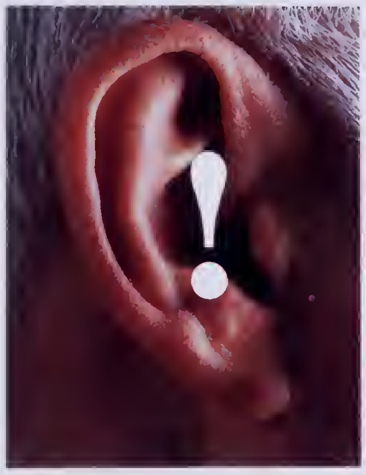
The AMA was instrumental in drafting a report on options for dealing with catastrophic illness that was supported by virtually all of the committee representatives. The proposal calls for using federal tax incentives to encourage employers to cover employees for expenses of catastrophic illness.

* * *

The AMA continues to work with Rep. G.V. Montgomery (D, Miss.) and representatives from the Armed Services Committees and the Pentagon on programs designed to assure physician services for the military. Attention is focused on methods to encourage physician participation in reserve component and/or civilian backup units, solutions to associated public relations problems, and inducements for voluntary participation. The

(Continued on page 24A)

Every day more and more physicians are hearing something remarkable from some of their hypertensive patients...



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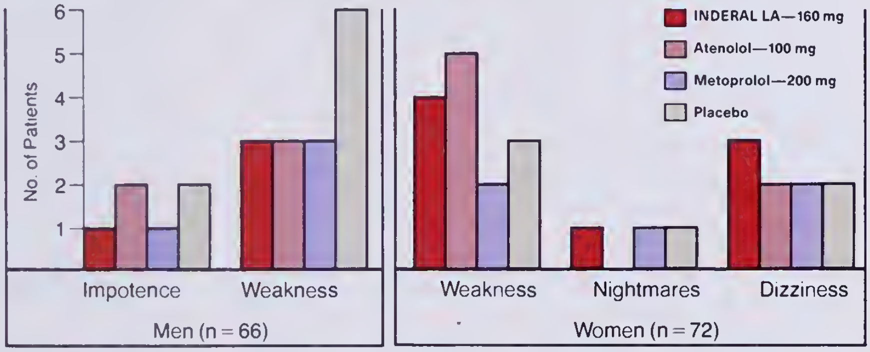

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INDERAL LA and INDERIDE LA Capsules should not be considered simple mg-for-mg substitutes for INDERAL and INDERIDE Tablets. Please see package circulars

CONTRAINDICATIONS

Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible)

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored. In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin. Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease. In patients with renal disease, thiazides may precipitate azotemia. In patients with impaired renal function, cumulative effects of the drug may develop

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs. Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL: Propranolol should be used with caution in patients with impaired hepatic or renal function. Propranolol is not indicated for the treatment of hypertensive emergencies

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that propranolol may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY: Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose. There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

NURSING MOTHERS: Propranolol is excreted in human milk. Caution should be exercised when propranolol is administered to a nursing mother

PEDIATRIC USE: Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL: Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia. Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids. Medication such as digitalis may also influence serum electrolytes. Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia. Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content.

Any chloride deficit is generally mild and usually does not require specific treatment, except under extraordinary circumstances (as in liver or renal disease). Dilutional hyponatremia may occur in edematous patients in hot weather; appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening. In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged. Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy.

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides. Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen. Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient. Thiazides may decrease arterial responsiveness to norepinephrine. This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY: Pregnancy Category C. Thiazides cross the placental barrier and appear in cord blood. The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult.

NURSING MOTHERS: Thiazides appear in human milk. If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE: Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular: Bradycardia, congestive heart failure; intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place; short-term memory loss, emotional lability; slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis; ischemic colitis

Allergic: Pharyngitis and agranulocytosis; erythematous rash; fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory: Bronchospasm.

Hematologic: Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous: Alopecia, LE-like reactions, psoriasiform rashes, dry eyes; male impotence; and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

Hydrochlorothiazide:

Gastrointestinal: Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation; jaundice (intrahepatic cholestatic jaundice); pancreatitis, sialadenitis.

Central Nervous System: Dizziness, vertigo, paresthesias, headache, xanthopsia

Hematologic: Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia

Cardiovascular: Orthostatic hypotension (may be aggravated by alcohol, barbiturates, or narcotics)

Hypersensitivity: Purpura, photosensitivity, rash; urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions

Other: Hyperglycemia, glycosuria, hyperuricemia, muscle spasm; weakness, restlessness, transient blurred vision

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn

* The appearance of these capsules is a registered trademark of Ayerst Laboratories

REFERENCE:

1. Ravid M, Lang R, Jutrin I. The relative antihypertensive potency of propranolol, oxprenolol, atenolol, and metoprolol given once daily. *Arch Intern Med* 1985;145:1321-1323

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THE NEBRASKA MEDICAL JOURNAL

NMA and NFMC

JOHN D. COE, M.D.
Medical Director, Nebr. Foundation for Medical Care

THE discussion at the May, 1986 annual meeting of the Nebraska Medical Association pinpointed the relationship of the Nebraska Medical Association and the Nebraska Foundation for Medical Care. Historically, the annual meeting of 1984 produced considerable debate over the desirability of the physicians of the State taking over the PRO for the State of Nebraska. It should be remembered that Nebraska, alone among the other 50 states, was the only one without a PSRO and roughly ten years of review experience which that produced. This was all changed by the TEFRA Act of March 1984, which mandated the institution of the Past-payment Pay System of DRGs and their monitoring of these by a duly constituted PRO.

Hence, in April 1984, the Nebraska Foundation for Medical Care, a legal entity separate and apart from the Nebraska Medical Association, applied for the PRO contract and was granted with a start-up date of October 1, 1984.

Currently there are approximately 1700 Nebraska physicians who are members of the Nebraska Foundation for Medical Care. The Board of the Foundation is made up of prominent members of the Nebraska Medical Association with state-wide geographical distribution, which includes at this time several elected officers.

In choosing the sponsoring organization for a PRO, medically staffed and medically oriented organizations are given first choice. If they elect not to be this sponsoring agency, then any organization can qualify such as a labor union, insurance company, or non-profit community organization. So in spite of the fact that a group of physicians belonging to the NFMC is the sponsoring agency in Nebraska, there is no legal relationship with the NMA. No matter who sponsors the PRO the actual review must by law be done by licensed Nebraska physicians. So regardless of the management the review will be done in the same manner and the criteria will be essentially the same.

The Medical Director of the NFMC primarily establishes liaison with the practicing physicians of Nebraska. I have had past experience in the operation of the NMA; however, at this time I have no input in the policy decisions of the NMA Board of Directors. I do provide prompt access to the NFMC Staff and the practicing physicians and contrawise, ready access of these same physicians to the NFMC staff.

It seems to me that there are considerable advantages to the present NMA - NFMC relationship. Ready access to a wide base of practicing physicians provides a valuable source of advice. This was of particular value when the criteria for care was developed. In addition, the knowledge of the NMA in regard to names, location and specialties are of particular value when selecting Reviewing Physicians.

At this May 1986 meeting some of the disadvantages of the relationship were discussed. It was suggested that there was a direct relationship between the NMA and the NFMC which is not actually the case. It was also suggested that the luster of the NMA could be tarnished by its association with the NFMC. This would be accomplished only if both of these organizations were inseparable.

Some have even suggested that membership in the NMA might be jeopardized by its relationship with the PRO activities of the NFMC. It seemed that most of these concerns were addressed and laid to rest during the discussion at the last annual meeting.

Even though by nature practicing physicians strongly object to being watched and monitored, on balance this system seems to be working. The experience gained these past two years has been valuable in solving some of the problems. We look forward to continued progress with the valuable support of the practicing physicians.

Indigent Health Care for Pregnant Women in Nebraska

DR. GILLES MONIF

POVERTY has traditionally been related to groups centered in large urban areas, and indigent care was part of care for poverty stricken persons. In Omaha, the unreimbursed funding to indigent care from Creighton University School of Medicine/Saint Joseph Hospital and the unreimbursed and tax supported base from the University of Nebraska School of Medicine/University Hospital have given health care for pregnant women with a disadvantaged background. This funding has come from two primary sources.[1]

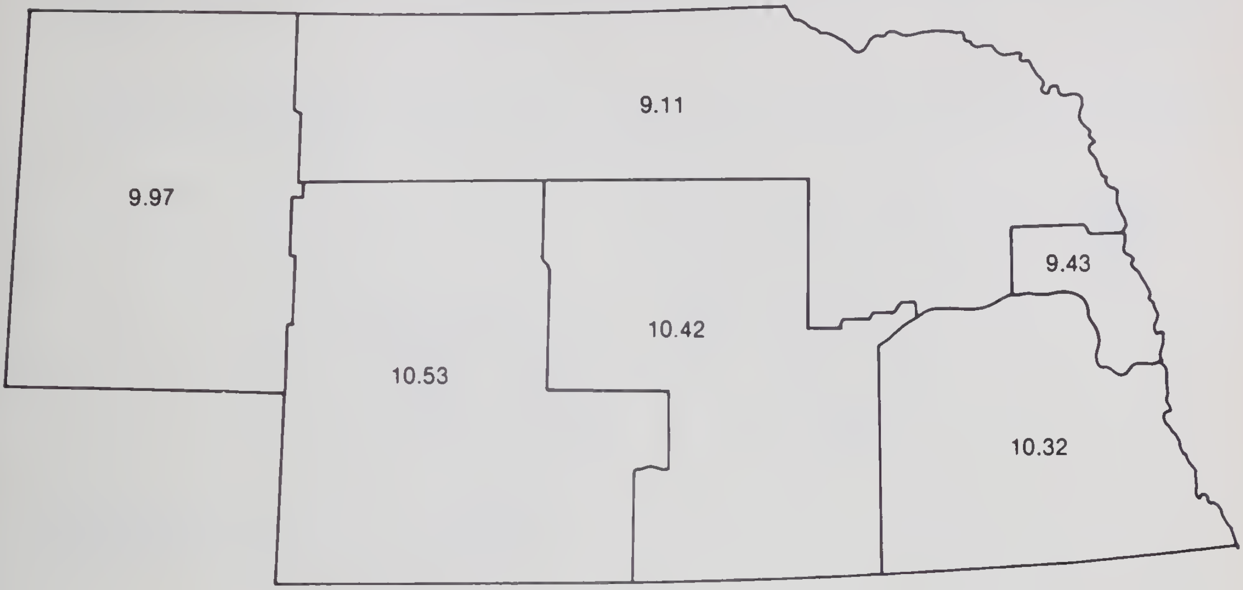
The principal source of funds for the University of Nebraska School of Medicine has been the federally funded Maternal and Infant Care Program which was and is the only federally funded care for pregnant women in Nebraska.

This health care program functioned extensively through 1981. At that time, "due to the uncertainty of funding levels, recruitment of patients at the University of Nebraska Medical Center for full services was limited to primigravidas (first pregnancies) living in designated census tracts".[1] The capping of unreimbursed expenditures negatively impacted on this federally funded Maternal and Infant Care Program. The number enrolled in the program fell dramatically from 1,281 in 1979 and 1,002 in 1980 to 335 in 1982. Since that date, there has been a gradual recovery in terms of the number of clients who received free prenatal care increasing to 660 in 1983.

Those women disenfranchised by the capping of indigent care funding by the University of Nebraska were apparently picked up by the health care system provided by Creighton University School of Medicine/Saint Joseph Hospital. In 1984, Saint Joseph Hospital was sold to American Medical International which changed the status of Saint Joseph Hospital from a non-profit organization to a tax-paying institution. The ability of Saint Joseph Hospital and University of Nebraska Medical Center to maintain a significant commitment to indigent care is tied to the willingness of unions, third party contractors and individual patients to share in this responsibility. Commitment for providing quality indigent health care necessitates their accepting an augmentation above calculated cost for the services received. The competitive health care market favors those providers who exclude from health care services patients from disadvantaged backgrounds who cannot pay.

Indigent care of pregnant women in Omaha is only a part of what is a statewide problem. The urban poor will become a progressively smaller component in the overall schema. The real health crisis will be in rural Nebraska. Before 1985 health care of pregnant women throughout Nebraska has been financed relatively through the private sector. The fiscal crisis of farmers appears destined to impact adversely on the ability of the increasing number of new poor of rural Nebraska to obtain quality prenatal and parturitional health care services. The Robert Wood Johnson Foundation estimated that in 1983 there were

Incidence of Infant Deaths* by Health Planning Area-1983



* The infant death rate is the number of infant deaths per 1,000 live births.

roughly 10 million Americans with no insurance and no means to pay for health or illness services and up to 28 million Americans with serious deficiencies of health care because of inadequate purchasing power. Such figures translate to 100-200,000 individuals in Nebraska.[2] What may be developing already in Nebraska is a major problem of significant proportions in rural America. Deaths among rural poor are much higher than the national average and the gap is widening. Poverty today is defined as an annual income of $10,650 for a family of four. Nationwide, 13.5 million poor people live in rural areas, compared with 12.9 million in inner cities. The death rate per thousand among rural poor infants grew from 10.82 in 1981 to 16.29 in 1983; nationally, the infant mortality rate dropped from 11.90 to 10.89. About 8.7 percent of the babies born to rural poor suffer from low birth weight under 5.5 pounds, while the national average is about 6.7 percent.

To date, Nebraska has done well. Neonatal deaths in Nebraska are below the national average; however, a discrepancy between rural and urban death rate is beginning to emerge. In 1983 four of the five rural health planning areas had discernibly higher rates of infant deaths than the Omaha urban area. (Figure 1)[3] To put these figures into a proper prospectus, Omaha, with its two medical schools and its established pattern for high risk pregnancies referral to these institutions, has had an inflated infant death rate due to intensive care nurseries and specializing in high risk perinatal and neonatal care.

Continuation of the farm crisis without aggressive and innovative interaction of government and the private sector may bring the Nebraska figures in line with the national figures.

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2. **Remarks by Robert E. Heaney,** Annual Award Dinner, 1984; CHAD Annual Regional Program Speech, 1984.

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Surgical Treatment of Children and Adolescents with Wolff-Parkinson-White Syndrome

CHRISTOPHER C. ERICKSON, M.D.
JOHN D. KUGLER, M.D.*
JOHN P. CHEATHAM, M.D.
LARRY A. LATSON, M.D.
CARL H. GUMBINER, M.D.
PHILIP J. HOFSCHIRE, M.D.
WILLIAM H. FLEMING, M.D.

Departments of Pediatrics (Section of Cardiology) and Surgery (Section of Thoracic and Cardiovascular) University of Nebraska Medical Center

WOLFF- Parkinson-White Syndrome (WPW) was first described in 1930 and, until 1967, all treatment was medical.[1,2] The advent of surgical treatment presented a new alternative to those patients who were refractory to conventional medical therapy or who had intolerable side effects to antiarrhythmia drugs. Several reports of surgical results have been published since Burchell and associates first reported a patient with WPW who underwent successful surgical division of the Kent bundle, or, using the recently revised terminology, the accessory atrioventricular connection (AAVC).[2-13] Although many of these surgical reports have included children and adolescents, most studies have concentrated on results in adults. In this study we report the results of our experience with surgical treatment in children and adolescents.

Methods

Patients

Records were reviewed of all patients (n=10) undergoing surgical division of AAVC at the University of Nebraska Medical Center from the first patient in 1979 to December 31, 1985. We included patients (n=2) with so-called "concealed" WPW (AAVC that permits only retrograde conduction and therefore these patients do not have evidence of WPW on surface ECG-Figure 1). Patient data is listed in Table 1. The age when each patient presented with symptoms that prompted electrophysiologic cardiac catheterization study ranged from 2 to 19 years, mean 9.7 yrs. In 6 patients, symptoms suggested a life-threatening arrhythmia (e.g. syncope), whereas 3 patients had medically refractory supraventricular tachycardia (SVT). One patient underwent cardiac catheterization for subsequent elective repair of concomitant congenital heart disease.

Electrophysiology Studies

All patients in the study underwent complete electrophysiologic evaluation using previously described techniques.[14] The electrophysiology studies (EPS) were carried out before operation to determine: 1) whether or not a life-threatening arrhythmia existed; 2) mechanism of the SVT or other arrhythmias; 3) characteristics of AAVC conduction e.g. determine whether or not a short antegrade effective refractory period of the AAVC was present, thus permitting rapid ventricular response during atrial flutter-fibrillation; 4) location of AAVC e.g. right or left free wall vs. septal, by noting earliest atrial activation during reciprocating tachycardia (retrograde to atrium via AAVC and antegrade to ventricle via AV node/His-Purkinje system); 5) response to antiarrhythmia drugs. Complete angiographic and hemodynamic studies were also performed to look for associated anomalies.

Indication For Surgery

Electrophysiology study data confirmed the presence of life-threatening arrhythmias in 6 patients. In 4 of the 6 patients a short antegrade refractory period of the AAVC in combination with the presenting symptom of syncope suggested a high risk for developing life-threatening arrhythmias. For these reasons, surgical division of the AAVC was recommended (patients 2, 3, 5, 8). In patients 1, 4, 7,

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*Reprint Requests: John D. Kugler, M.D., Section of Pediatric Cardiology, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, NE 68105.

9 surgical division was recommended because of medically refractory SVT. In patient 9, although the chosen drug (quinidine) effectively controlled the SVT, side effects (skin rash) required stopping the drug and the patient and family did not wish to pursue further attempts of medical therapy. Because of the potential risk of severe postoperative arrhythmias,

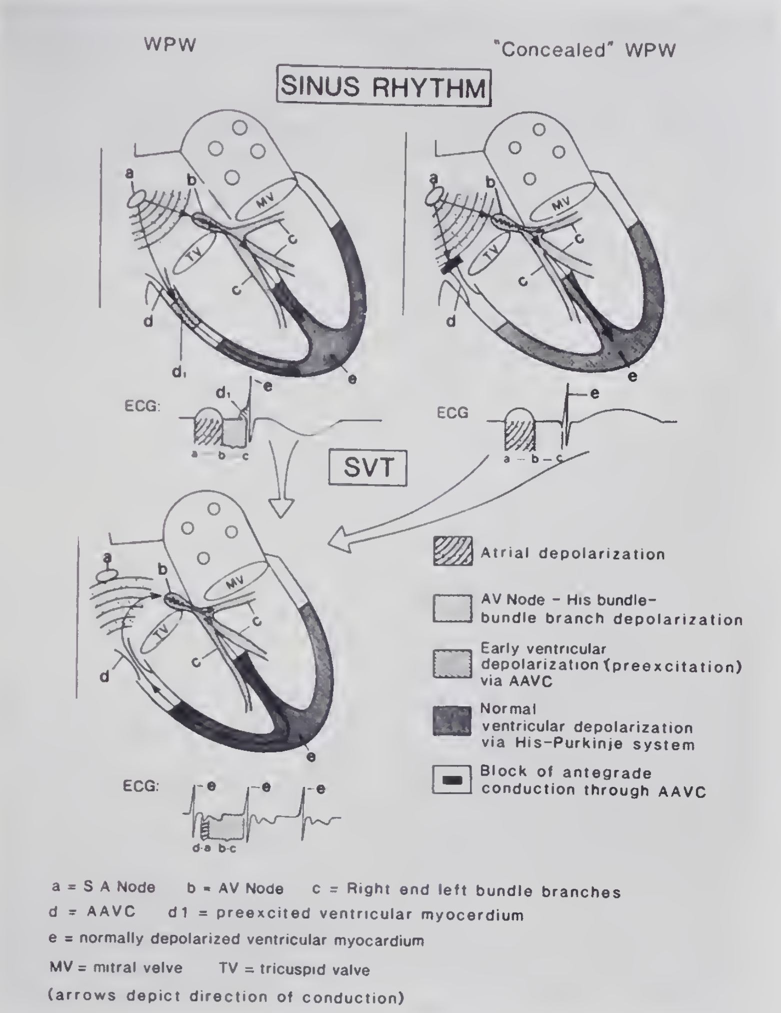
WPW
"Concealed" WPW
SINUS RHYTHM
a
b
MV
TV
c
d
d₁
e
ECG:
a – b – c
ECG
SVT
d-a b-c
▨ Atrial depolarization
AV Node – His bundle–bundle branch depolarization
Early ventricular depolarization (preexcitation) via AAVC
Normal ventricular depolarization via His–Purkinje system
Block of antegrade conduction through AAVC
a = S A Node b = AV Node c = Right end left bundle branches
d = AAVC d1 = preexcited ventricular myocerdium
e = normally depolarized ventricular myocardium
MV = mitral velve TV = tricuspid valve
(arrows depict direction of conduction)

FIGURE 1: Diagramatic illustration of cardiac electrical conduction in patients with either "manifest" Wolff-Parkinson-White (WPW) syndrome or "concealed" WPW. During sinus rhythm (top) in patients with WPW (left), ventricular depolarization occurs via both the normal AV node/His-bundle branch system (b-c) as well as via antegrade conduction of the accessory atrioventricular connection (AAVC) depicted as "d". The ECG tracing demonstrates the temporal relations to the areas of depolarization. Note the preexcitation of the QRS (delta wave, d_1) as it passes through the AAVC (d). During sinus rhythm in patients with "concealed" WPW (top right), the properties of the AAVC do not permit conduction in the antegrade direction. Therefore, normal ventricular depolarization occurs via the AV node/His bundle - bundle branch system. Note that the ECG shows no preexcitation (delta wave) of the QRS.

During normal QRS supraventricular tachycardia (SVT) in either patients with WPW or "concealed" WPW, the AAVC participates in the reentry reciprocating tachycardia by conducting in the retrograde direction (e-d). The antegrade conduction is through the AV node/His bundle - bundle branch system (b-c). Thus, the reentry circuit conduction continues through normal ventricular depolarization and retrograde through the AAVC. This permits continuation of conduction back to the AV node, as well as retrograde to the sinus node (d-a). The ECG demonstrates this repetitive sequence.

patient 6 underwent surgical division of the AAVC during concomitant repair of her congenital heart disease.

Surgical Techniques

Intraoperative Mapping: Before surgical division of the AAVC, epicardial and endocardial mapping were carried out to confirm the AAVC location predicted by EPS at cardiac catheterization. First, temporary pacing leads were sutured on the atrium and ventricle (1 pair each). Second, during sinus or atrial paced rhythm, a mapping probe (Elecath®, Electro-Catheter Corporation, Rahway, NJ) or a custom-made ring electrode was positioned by the surgeon on the ventricular epicardium at multiple sites around each AV valve annulus. The electrograms were displayed on a freeze-oscilloscope and recorded on heat-sensitive paper at 100 mm/sec. The earliest ventricular epicardial activation (in reference to the electrogram from the area recorded by the temporary ventricular leads) localized the AAVC. To confirm the site as well as to determine whether or not a previously undetected second AAVC existed, the atrial epicardium similarly was mapped during ventricular pacing and again during reciprocating tachycardia. Finally, after cannulation and institution of cardiopulmonary bypass, the atrial endocardium was precisely mapped in the area defined by epicardial mapping. In each patient the epicardial and endocardial mapping confirmed the AAVC location predicted by EPS.

Surgical Division of the AV Connection:

The atrium was incised 2-3 mm above the AV valve annulus. The incision was started in the endocardium at the site of the AAVC and extended 2-5 cm in both directions around the annulus. At the second operation in patient one and in each patient thereafter, the depth of the incision was extended from endocardium through to and including the epicardium. The atrium and fat pad were carefully dissected away from the ventricular epicardium using a nerve hook. After complete through and through dissection of the atrium from the annulus, the atrium was then reapproximated with the annulus in its original position. In patient one at the first operation, a through and through incision was not performed. Before and after weaning from bypass, repeat mapping was performed to ensure that the AAVC was divided and to ensure that additional previously undetected AAVC were not present. Immediately after surgical division in each patient, there was no evidence of any AAVC by endocardial and/or epicardial mapping. However, patients 1 and 8 underwent reoperation for reappearence of an AAVC 13 months and 1 day, respectively. In each patient, successful surgical division was accomplished (Table 1, Figure 2 a,b). Therefore, initial success was 8 of the 10 patients (80%) and final success was 10 of 10 patients (100%)

Early Complications

In the one patient with a septal AAVC, surgical complete AV block was noted in the operating room and a permanent pacemaker was implanted. Except for the common post-pericardiotomy syndrome (6 patients), no other early postoperative problems occurred.

Follow-up

Each patient was evaluated by history and physical examination, and each has undergone follow-up noninvasive testing using standard ECG, 24 hour ambulatory ECG (Holter), chest x-ray film and echocardiography/Doppler. Four patients underwent repeat EPS. Follow-up after operation has ranged from 3 months to 6.7 years, mean 2.3 years.

Symptoms: One patient (patient 1) had syncope after surgery and therefore underwent repeat EPS which showed no residual AAVC. The syncope was attributed to a vasovagal cause. Three patients (patients 1, 2, and 3) reported palpitations but arrhythmias were not found on Holter. Therefore, EPS was carried out and in each no AAVC was found. However, atrial flutter was induced in patient 3, and in patient 7 atrial flutter was documented on Holter. Atrial flutter was documented in both patients before surgery. Although neither patient has a residual AAVC, chronic anti-arrhythmia drug treatment for atrial flutter is required in each patient (quinidine and flecainide, respectively).

Postoperative Arrhythmias: In addition to the 2 patients with postoperative atrial flutter, 1 patient (#9) has chronic sinus tachycardia at 100-120 bpm. A search for causes of chronic sinus tachycardia revealed a slightly elevated serum T3 and further investigation is currently underway. Only 1 patient

TABLE I

Patient	Age at EPS	Associated Structural Heart Disease	Syncope	ECG	Associated Arrhythmias	Indication for Surgery	Age at Operation	Location of AAVC	Successful Operation
1	15 yrs 16 yrs	—	—	WPW	PSVT	Incessant RT Angina	15 yrs 16 yrs	L lateral	-/+
2	18 yrs	—	+	WPW	PSVT Atrial fib.	Syncope	18 yrs	L post. lat.	+
3	18 yrs	—	+	WPW	PSVT Atrial flut/fib	Syncope	18 yrs	R post. lat.	+
4	2 yrs	—	+	Normal	PSVT	Medically Refractory RT	4 yrs	R lateral	+
5	19 yrs	Hypertrophic Cardiomyopathy MVP	+	WPW	PSVT Atrial flut/fib	Syncope	19 yrs	R post. septal	+
6	3 yrs	Ebstein's, ASD VSD, Severe PS	—	WPW	None	Cong. heart disease	3 yrs	R lateral	+
7	8 yrs	Ebstein's TR	—	RBBB, SVT junct./sinus	PSVT sinus/junct.	Incessant RT; cardiomegaly	14 yrs	R ant. lat.	+
8	2.5 yrs	—	+	WPW, LV strain SVT, LAD	PSVT	Syncope	2.5 yrs 2.5 yrs	R ant. lat R post. lat	-/+
9	9.5 yrs	mild MVP, TR	—	WPW	PSVT	Medically refractory RT	10.5 yrs	L posterior	+
10	4.5 yrs	—	+	WPW, SVT	PSVT	Syncope	4.5 yrs	R ant. lat	+

Abbreviations: AAVC, accessory atrio-ventricular connection; ASD, atrial septal defect; ECG, electrocardiogram; EPS, electrophysiology study; L, left; LAD, left axis deviation; LV strain, left ventricular strain; MVP, mitral valve prolapse; PS, pulmonic stenosis; PSVT, paroxysmal supraventricular tachycardia; R, right; RBBB, right bundle branch block; RT, reciprocating tachycardia; TR, tricuspid valve regurgitation; VSD, ventricular septal defect; WPW, Wolff-Parkinson-White.

(#1) had reappearance of WPW following discharge from the hospital; the other recurrence (patient #8) was noted 1 day after initial operation. Patient 1 also had associated recurrent PSVT before reoperation. Subsequently neither WPW nor PSVT has occurred clinically or during EPS.

Postoperative AV Value Regurgitation:

Mild tricuspid or mitral regurgitation was found by Doppler-2D echo in 5 of the 10 patients after operation. In 2 of the 5 patients, the tricuspid regurgitation was present preoperatively. In each patient with postoperative AV valve regurgitation, the severity was trivial or mild, there were no associated symptoms, and there was only mild heart enlargement noted on chest x-ray film indicating no more than mild hemodynamic effects.

Discussion

The most common of preexcitation syndromes, Wolff-Parkinson-White Syndrome, was first described in 1930.[1] The characteristic features on ECG are: 1) delta wave; 2) shortened P-R interval; and 3) a prolonged QRS complex (Figure 1, 2 a,b).[5,8,15] These features are found in 1-3 out of 1000 patients but in the general population, the prevalence is estimated at 1 in 700.[5,16] Congenital heart disease may be present in as many as 20% of WPW patients.[5,6,15] Common defects include Ebstein's anomaly, ventricular septal defect, atrial septal defect, transposition of the great arteries, mitral valve prolapse, aortic stenosis, and hypertrophic cardiomyopathy.[3, 6, 14, 15]

The most common arrhythmia is supraventricular tachycardia (SVT) of the orthodromic reciprocating type: antegrade conduction through the AV node (AVN) and His-Purkinje system and reciprocal retrograde conduction via the AAVC (Figure 1). The AAVC is composed of functional specialized myocar-

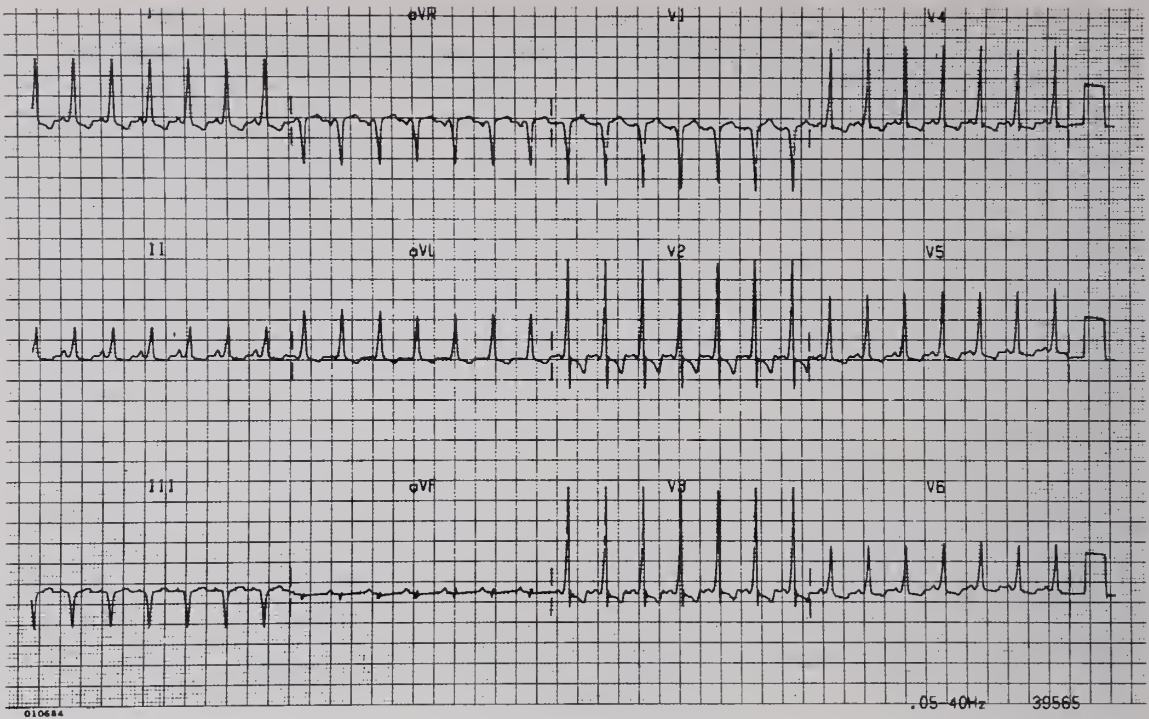

FIGURE 2A: Preoperative 12-lead simultaneous ECG recording of sinus rhythm in patient 8. Preexcitation (delta wave) is visible in all of the leads except aVF.

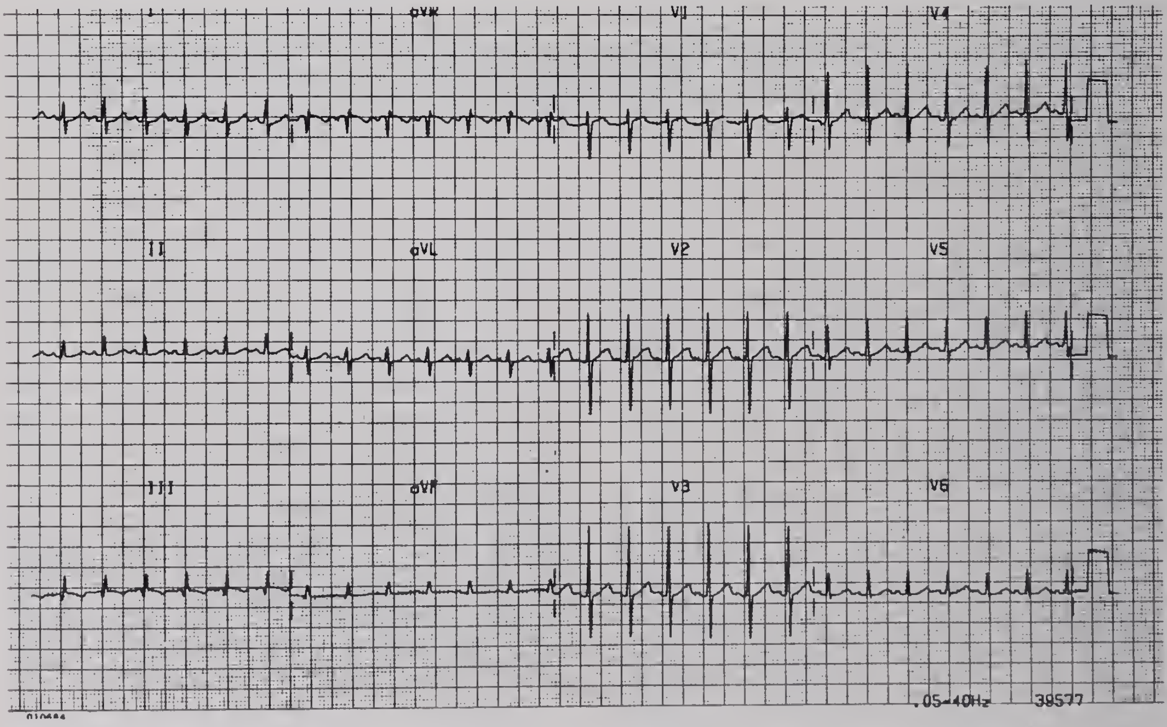

FIGURE 2B: Postoperative ECG recording of sinus rhythm in the same patient as shown in 2a. Note the normal QRS morphology and no evidence of preexcitation.

dium. Conduction occurs in sinus rhythm antegrade through both AVN/His-Purkinje system and through the AAVC which therein produces ventricular preexcitation (delta wave) features on the ECG. Many patients who have an AAVC, however, do not have evidence of preexcitation (so-called "concealed" WPW) because their AAVC only conducts in a retrograde direction (e.g. our patients 4 and 7). Nevertheless, a premature beat or acceleration of the sinus rate may cause paroxysmal reciprocating tachycardia (Figure 1).

Life-threatening arrhythmias in patients with WPW are often related to the occurrence of another arrhythmia. If a patient with an AAVC and preexcitation has an associated arrhythmia of atrial flutter-fibrillation, there is a risk of fast antegrade conduction to the ventricles via the AAVC, thus producing severe life-threatening arrhythmias such as ventricular fibrillation. This is most likely to occur in patients with a short antegrade refractory period of the AAVC, thus permitting atrial beats at a fast rate to proceed to the ventricles. Patients 2, 3, 5, and 8 had this life-threatening combination. Digitalis or verapamil can enhance antegrade AAVC conduction thus potentiating the risk of sudden death in such patients.[5,17,18]

The patient who has "concealed" WPW usually does not have antegrade conduction capabilities in the AAVC and thus is protected from rapid ventricular conduction by the usual means: the atrial beats are slowed by AV nodal conduction. However, there are some patients with"concealed" WPW who have excellent or "enhanced" AV nodal function that can be associated with similar rapid ventricular rates during atrial flutter-fibrillation and/or reciprocating tachycardia. In our patients (4, 7) with "concealed" WPW, medically refractory SVT was the major problem.

The majority of surgically treated patients in any reported series are comprised of those who have documented life-threatening arrhythmias, or who have a high risk of developing these arrhythmias, or who have medically refractory SVT.[3-5,8-10,12,13] Our patients likewise portray this pattern but also include a patient who required repair for congential heart disease but who did not have arrhythmias preoperatively. Prophylactic surgical division of the AAVC is now widely accepted because of the higher risk of developing severe postoperative arrhythmias that may compromise postoperative care.[6,9,14] It is also emphasized that these 10 patients within a 6-1/2 year period represent only a very small portion of patients that are seen in our clinic or who are discussed by telephone with a referring physician. Many patients who have infrequent or no debilitating symptoms are not treated medically or surgically. Patients without evidence of symptoms or arrhythmias suggesting a life-threatening problem but who require treatment because of bothersome symptoms virtually always undergo medical treatment. The definition of "medically-refractory SVT" varies widely among cardiologists as well as with individual cardiologists because of the wide variability among patients to tolerance of drugs and symptoms. Some patients who have refractory SVT prefer a trial of every antiarrhythmia drug, including investigational drugs, before surgery is considered. Other patients do not wish to pursue a second drug if they have a drug side-effect or tachycardia recurrence with the first drug.

Our surgical results are comparable with those previously reported.[3-13] The gradual improving success rate among centers active in arrhythmia surgery is related to several factors. Our first patient who underwent surgery in 1979 illustrates the benefit of a change in surgical technique. Based on the vast pioneering experience at Duke University, the incision and dissection was not extended to a through-and-through incision of the epicardium.[3,7] The initial dissection in this patient included only the recommended external dissection of the fat pad to the epicardium together with the endocardial incision extended to the epicardium. After the recurrence of preexcitation several weeks later, a through-and-through dissection was carried out successfully at reoperation. Other surgeons also have noted that the more extensive technique resulted in improved results. This is best illustrated in the recent report by Cox, et al.[13] Their study found that results dramatically improved after 1981 when they changed their technique to a complete through-and-through incision. Extension of the incision to include a greater distance around the annulus led to further improvement in results. It is now well-known that bands of AAVC or multiple AAVC may exist in these bands.[8,11,14] In some patients multiple AAVC are detected in the operating room after the initial surgical division attempt but others may not permit conduction until hours, days, or weeks after surgery. The cause of the delayed appearance of AAVC conduction in some patients is unknown but probably relates to the slow healing from trauma to the area from the initial surgical division/dissection. The other surgical complictions in our patients included those commonly reported in other similar series.

Summary

Surgical division of the AAVC is an acceptable treatment alternative for children and adolescents who have associated life-threatening arrhythmias. Moreover, the technique is useful in these patients who have medically refractory SVT or who face life-long treatment with antiarrhythmia drugs. Finally, the technique is now recommended for asymptomatic patients who require cardiopulmonary bypass for other heart disease because refractory or life-threatening postoperative arrhythmias may complicate an otherwise uneventful postoperative course.

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Hansen's Disease (Leprosy) Revisited

BALACHANDRAN WARIYAR, MBBS, M.D., D.P.M.
710 North Alpha
Grand Island, NE 68803
LEO M. ADAMS, M.D.

A twenty-four year old Laotian female was evaluated for non-specific, gradually progressive complaints of tingling, numbness, pain in the extremities and skin lesions. No other relevant medical history was obtainable through an interpreter. Examination showed no central nervous system or cranial nerve dysfunction. A sharply defined infiltrative rash was present on the right forearm and anterior aspects of the legs. There was alopecia over these areas plus depigmentation with erythematous edges. Sensory testing showed hypalgesia, hypesthesia and thermoanesthesia over these lesions. Posterior columns (joint and vibration senses), deep tendon reflexes and plantar responses were physiologic. The peroneal nerves were palpable and thickened at the fibular heads. No other system involvement, motor weakness or trophic changes were clincially evident.

A clinical diagnosis of Hansen's Disease (tuberculoid type) was made. Biopsy samples from suspected areas sent to the National Hansen's Disease Center, Carville, confirmed the clinical suspicion. The histopathology showed granulomatous inflammation composed of epithelioid cells and lymphocytes with destruction of the nerve. No acid-fast-bacilli were identified. The pathologic diagnosis was borderline tuberculoid Hansen's Disease.

Discussion:

Hansen's Disease is caused by Mycobacterium leprae and the manifestations of the disease are varied. The host-parasite relationship determines the clinical forms. A patient with good resistance to the parasite develops tuberculoid disease. A subject with hardly any resistance has malignant disseminated lepromatous form of the disease.

The following clinical forms are recognized:

1. Indeterminate (I)
2. Tuberculoid (T)
3. Lepromatous (L)
4. Borderline Tuberculoid (BT)
5. Borderline Lepromatous (BL)
6. Purely neural (P)

The above is a simplifed classification of Hansen's Disease proposed by Dr. C. K. Job.[1]

Transmission of leprosy is between humans with no alternate host. Prolonged skin contact was once believed to be the only mode of transmission of Mycobacterium leprae, but today inhalation of infected droplets from nasal discharge of patients and the role of arthropods, especially flies as carriers, is increasingly recognized. Leprosy presents a variety of identifiable types — based on clinical, histological, bacteriological and lepromin test observations. Tuberculoid leprosy (TL), with a strong cell mediated immunity response, is at one end of the spectrum, while Lepromatous Leprosy (LL), with no cell — mediated antibody response, occupies the other end. Graded borderline cases, borderline tuberculoid (BT), borderline (BR), and borderline lepromatous (BL) lie in between. Finer shades, including indeterminate, defying accurate classification are described. Fortunately non-lepromatous types constitute 80% of leprosy cases. The majority of Hansen's patients have a non-contagious and curable disease.

In endemic areas the diagnosis is not difficult. Hansen's Disease is primarily a disease of the nerves, so the earliest manifestations are neural. The nerves at risk are the peripheral nerves, whether nerve trunks or dermal nerves, and three cranial nerves which course outside the skull, namely, olfactory (1st), trigeminal (5th) and facial (7th). Presenting symptoms and signs are dependent on the patient's cell-mediated immunity. Whatever the type of Hansen's Disease, neural manifestations include paresthesia, pain, anesthesia and various degrees of muscle wasting and paralysis. The ulnar nerve is the commonest to be affected and bilateral asymmetry is the rule. An area of skin insensitivity is overlooked by the patient and even a painless injury can be ignored. Muscle wasting or paralysis is confined to muscles of the face, hands, feet and lower legs. Tendon reflexes and position sense are usually unaffected. There is a wide range of potential clinical manifestations, including involvement of skin, nasal mucosa, mouth, pharynx, larynx, trachea, the reticuloendothelium of small blood vessels.

In non-endemic areas of the world the differential diagnosis has to include other peripheral neuropathies, especially sensory neuropathy, syringomyelia, and at times anterior horn cell disease. In the absence of sensory loss, leprosy should not be diagnosed. Proximal muscle wasting, weakness, and generalized hypoactive reflexes are very uncommon. Pyramidal tract signs are never seen.

Prognosis is entirely dependent on the type, early diagnosis and sustained treatment. The foundation of all recommended treatment regimens evolves around the sulfones, namely dapsone. It is effective, inexpensive and relatively non-toxic.

Current recommendations of the National Hansen's Disease Center, Carville, for patients with sulfone sensitive M. leprae are dapsone 100 mgs. daily given in combination with rifampin 600 mgs. daily for three years to multibacillary cases, followed by dapsone monotherapy or clofazimine in patients with sulfone-resistant bacilli.[3] If hepato-toxicity develops (SGOT or SGPT rises to above two and one-half times the upper limits of normal) in a patient receiving rifampin or ethionamide, these drugs are discontinued. Where toxicity occurs in a patient receiving ethionomide, it would probably be safe to restart rifampin (with clofazimine) when liver functions return to normal. In paucibacillary cases rifampin 600 mgs. is given daily for six months. Its greatest drawback has been its cost and this has led to considerable variation as to how it is prescribed in various parts of the world. The drug is strongly bactericidal for the Hansen's bacillus, but should never be used as monotherapy since resistance occurs in three to four years. Other drugs used are clofazimine in doses of 50 mgs. to 100 mgs. It is weakly bactericidal and higher doses suppresses reactive episodes. Its most prominent side-effect is coloration of the skin.

Ethionamide and prothionamide are intermediate in its bactericidal activity standing between dapsone and rifampin. The usual dose is 250 - 500 mgs. daily. Gastrointestinal symptoms and hepatotoxicity are not uncommon.

Thiacetazone in a dose of 150 mgs. is bacteriostatic for the Hansen bacillus, but because of drug resistance and relative toxicity (agranulocytosis), its use is diminishing. Streptomycin is given 1 gm. IM three times weekly. Resistance develops within a few years if used alone, so it should only be used in combination therapy.

Inactive disease is defined as negative skin scrapings for at least one year, a negative biopsy and no clinical evidence of activity or progressive neural deficit. On the average this takes one to two years for indeterminate and tuberculoid cases, two to three years for borderline tuberculoid cases, and three to ten years for multibacillary cases. After inactive status is attained, the National Hansen's Disease Center, Carville recommends a relatively conservative approach, continuing dapsone (clofazimine in patients with sulfone-resistant bacilli) for three years in determinate and tuberculoid cases, five years in borderline tuberculoid cases, ten years in mid-borderline cases and for life in borderline lepromatous and lepromatous patients. Our patient is on dapsone and rifampin in the appropriate doses.

Conclusion:

This case report is presented for its medical interest and curiosity in this part of the world. Since many of us now do see South East Asian patients in our practice, it is prudent that we keep leprosy at the back of our minds when they present with varying peripheral neurodermatologic manifestations. Following confirmation of the diagnosis, the family and close contacts should be screened.

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Distribution of Drug Screen Results at the University of Nebraska Hospital in 1985

JEFFREY ALLEN HUTH, Ph.D.
University of Nebraska Medical Center, Department of Pathology and Microbiology, 42nd and Dewey Avenue, Omaha, NE 68105.

THE use of illicit drugs is a major concern for everyone. While the use of restricted substances generally begins during adolescence with the use of tobacco, several articles have demonstrated a progression to the use of alcohol and various drugs.[1-6] Such studies focused on adolescent drug use in Maryland[1] and New York,[2-4] as well as on the national level.[5, 6]

One study in Nebraska[7] used a similar approach to O'Malley et al.[5] in collecting data on alcohol, marijuana, and tobacco use among adolescent Nebraska students. The data show that the use of alcohol is greatly favored over illicit drug use; however, the use of marijuana as well as other illicit drugs is evident. It must be recognized that the use and abuse of such substances often results in various degrees of intoxication, addiction, and/or social withdrawal and delinquency.

From a clinical viewpoint, the goal was to establish a clinical drug screening program in our laboratory. In order to do so efficiently, drug use data was evaluated to determine the prevalence of the various drugs abused by the patient population at the University of Nebraska Medical Center. Through evaluation of such data, a drug screening program was designed to detect those substances most frequently found in the patient population. This paper reports the findings of patient drug abuse for 1985 at the University of Nebraska Medical Center and a comparison of these data with a national survey.[8]

Methods

To determine the prevalence of the drugs abused by the population, records of drug screens performed on patients during 1985 were collected and tabulated. All drug screens were performed by an independent reference laboratory using various analytical techniques. Drug data was tabulated as reported by the reference laboratory. While most drugs and/or drug classes are detected by the screening process, it must be recognized that alcohol and cannabinoid detection generally require procedures separate from the general drug screen. Accordingly, data on these two substances may be underestimated since these analyses may not have been requested on all drug screen orders. The findings of Newman et al. would also indicate a higher prevalency than the results indicate.[7] The data on alcohol and cannabinoid use is included for completeness.

Results

During 1985, a total of 226 drug screens were performed on 179 patients at the University of Nebraska Medical Center. The tests were performed on urine (154), blood (53), and gastric (19) samples. While a large percentage of drug screens were performed on urine alone (54.0%), screens on urine, blood, and gastric specimens in various combinations were performed. Table 1 lists the frequency of drug screens performed on individual and combination specimens from the population studied.

For the 179 patients evaluated, 126 patients (70.4%) had at least one drug detected. If caffeine and nicotine are excuded, 113 patients (63.1%) had at least one drug detected. In 42 patients (23.5%), no drugs were detected. Results could not be located for 11 patients (6.1%)

In the 126 patients with positive drug screens, a total of 358 drugs were found which corresponds to 2.84 drugs/person. This finding is similar to that found by Jones et al. in one national survey.[8] An average of 3 drugs/specimen was found in a population of 1000. If

TABLE 1
Drug Screening Specimen Submission for 1985

Urines:		154
Urine alone:	122	
Urine and Blood:	24	
Urine and Gastric:	1	
Urine and Blood and Gastric:	7	
Blood:		53
Blood alone:	14	
Blood and Gastric:	8	
Blood and Urine:	24	
Blood and Urine and Gastric:	7	
Gastric:		19
Gastric alone:	3	
Gastric and Blood:	8	
Gastric and Urine:	1	
Gastric and Blood and Urine:	7	
	Total	226

TABLE 2
Distribution of Drugs Found in Patient Specimens

	Number of Drugs Found	1	2	3	4	5+
Number of Patients	126 (a)	34	27	30	13	22
	113 (b)	41	36	20	8	8

(a) Including caffeine and nicotine

(b) Excluding caffeine and nicotine

caffeine and nicotine are excluded, 253 drugs were found in 113 Nebraska patients for an average of 2.24 drugs/person.

Table 2 gives the number of patients in which a particular number of drugs were found. When caffeine and nicotine are included in the data, the distribution of drugs found is relatively equal from one drug found to 5+ drugs found. When caffeine and nicotine are excluded, the number of drugs found per patient shifts toward 1 and 2.

In the 358 drugs detected, 71 different substances were found. Table 3 lists the twenty most frequently found drugs in the population tested. Also listed are the fifteen drug classes most frequently found. Of interest is that this data is again very similar to that found on a national scale by Jones et al.[8] The prevalence of the drugs found in this study do not parallel the national survey; however, 14 of the most frequently found drugs in the national survey are common to the top 20 in this population. By drug class, 15 of the national top 20 are common to this study.

Discussion

For the population studied, it is clear that urine is the specimen of choice. While a blood specimen may provide useful dose/response data for some drugs, other drugs may not achieve significant blood concentrations due to high lipid solubility (cannabinoids), or the concentrations lie below the threshold of detection for the screen. Similarly, gastric specimens may provide a source for high concentration of pure drug; however, the potential lapse of time between drug ingestion and specimen collection does not ensure the presence of residual drug. A major drawback to use of urine may be the difficulty of promptly obtaining it. A bladder catheter can be used to expedite collection. Drug dilution in the urine may lead to false negative results. Despite these potential obstacles, it is generally recognized that urine is the specimen of choice.[9]

The high prevalency of nicotine (38) and caffeine (67) in the population studied is similar to the national survey.[8] Nicotine was the substance most frequently found in the national population whereas it was the second most found substance in this population. These data indicate the high degree of tobacco use in the suspected drug using population.

Caffeine was the most prevalent substance found in this population and was the sixth most frequently found substance in the national survey.[8] The ubiquitous use of caffeine in the American diet generally poses no harm. However, it must be recognized that several over-the-counter medications are caffeine containing and are sold exclusively for mental stimulation. An overdose of these substances could indeed lead to a life-threatening crisis due to the cardiac effects of caffeine.

In the comparison of the drugs most frequently found in a national survey and this population, six drugs in the national top twenty were not common to this study. These drugs would include total opiates, ephedrine, benzo-

TABLE 3
Drugs Most Frequently Found During 1985

	Frequency	
Drug	UNMC	National*(8)
Caffeine	67	156
Nicotine	38	498
Acetaminophen	34	237
Cannabinoids	22	187
Salicylates	21	164
Phenobarbital	13	67
Codeine	11	40
Alcohol	10	**
Phenytoin	10	34
Phenothiazines	7	92
Propoxyphene	6	42
Benzodiazepine metabolites	6	293
Diphenhydramine	6	59
Triamterene	6	29
Amitriptyline/ Nortriptyline	5	86
Diazepam	5	***
Lidocaine	5	15
Meperidine	5	18
Phenylpropanol-amine	5	76
Butalbital	4	24

	Frequency	
Drug Class	UNMC	National*(8)
Caffeine	67	156
Nicotine	38	498
Acetaminophen	34	237
Cannabinoids	22	237
Salicylates	21	164
Sympathomimetic amines	20	268
Barbiturates	19	107
Benzodiazepines	17	312
Opiates	16	169
Phenothiazines	12	92
Alcohol	10	**
Phenytoin	10	34
Tricyclic antidepressants	8	163
Triamterene	6	29
Lidocaine	5	15

* Data from ref. 8; 1000 nationally distributed patients.
** Not determined in ref. 8.
*** Not listed separately in ref. 8.

ylecgonine/cocaine, cimetidine, methadone, and doxepin. In the Nebraska population, opiates as a class was the ninth most prevalent substance. By individual drug, the major opiate was codeine. Morphine was found only twice with codeine metabolites and oxycodone being the other opiates found. The low frequency of morphine may indicate a low incidence of heroin use in the Nebraska population studied, although the data is not conclusive by any means.

Similarly, cocaine was found in only one patient in this study group while its widespread use is reflected in the national survey;[8] cocaine was the fourteenth most frequently found substance. Ephedrine, cimetidine, methadone, and doxepin were frequent findings in the national survey. In the Nebraska study, ephedrine, cimetidine, and methadone were found three times and doxepin once. These four drugs either by individual drug or drug class are represented in the top twenty-five substances found in the Nebraska population.

Summary

The drug abuse data obtained on the 179 patients in 1985 are not signficantly different from that found in a national survey. The biggest difference appears to be the high prevalence of total opiates and cocaine nationally. Whereas the use of these in the Nebraska population was low. Opiates as a class was high in the Nebraska study, but codeine was 11 of the 16 opiates found. The low prevelancy of cocaine in the Nebraska group is a welcome finding but does not reflect the well recognized national use.

Through the evaluation of the drug abuse data, those substances most prevalent can be recognized. Accordingly, in the design of a laboratory drug screening program, procedures can be established to detect the presence or absence of these substances. It is virtually impossible for a screen to detect all substances. Thus, by designing a program following the guidelines of the drug abuse data, the sensitivity of a screen can be greatly improved. The result is more efficient use of the laboratory.

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X-RAY OF THE MONTH

A 56 year old male entered the hospital complaining of chest pain and severe malaise. His past medical history was non-contributory. Four hours prior to admission and following a rather prolonged alcohol binge, he vomited repeatedly and shortly thereafter experienced rather severe chest pain and also expressed a sense of impending death.

On physical exam there was pain to palpation in the epigastrium. There were diminished breath sounds in the left lung base. The remaining physical exam was not contributory.

A chest x-ray was obtained and shows what appears to be mediastinal air, plus blurring of the left diaphragm with an early pneumonic infiltrate or atelectasis and possibly a small effusion.

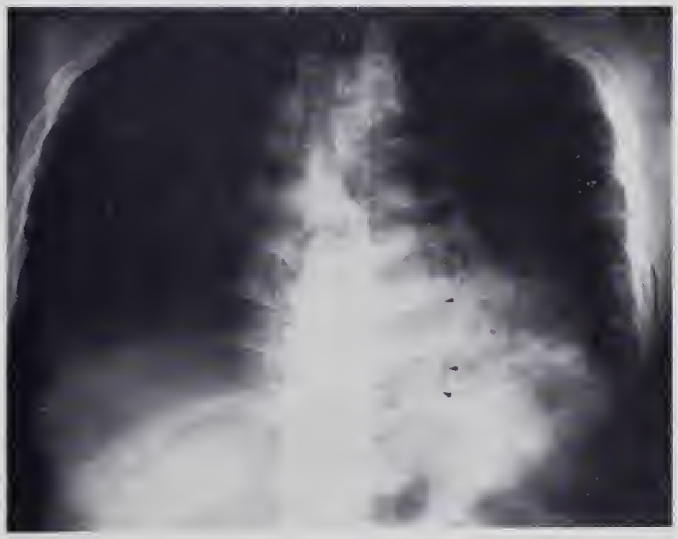
What is your diagnosis?

Answer: Esophageal perforation.

Boerhaave's syndrome refers to "spontaneous" rupture of the esophagus secondary to a sudden rise in esophageal intraluminal pressure. This is usually caused by forceable vomiting after excessive food and alcohol intake. Alcohol is felt to predispose to rupture by causing spasm of the esophagus and/or failure of the pharynx to open during emesis, preventing unhindered explusion of gastric contents. This leads to increased esophageal pressure and subsequent rupture.[1] Non-emetogenic causes associated with spontaneous esophageal rupture include asthma, epilepsy, forceful swallowing, straining during parturition or defecation and heavy lifting. These account for less than 5% of cases, the majority being related to emesis.[2]

The most common site of perforation is in the posterolateral wall of the distal esophagus, 90% occuring on the left.[3] A sharp longitudinal tear is present, usually 1-4 cm. in length. Initially, splitting of the external esophageal muscle occurs. The mucosa then herniates through the muscular defect and tears, completing the rupture.[4]

MARTHA A. KOMENT, M.D.
Department of Radiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, NE 68105
JAMES J. PHALEN, M.D.
Chief, Radiology Service, Veterans Administration Medical Center, 4101 Woolworth Avenue, Omaha, NE 68105



Clinical suspicion of Boerhaave's syndrome is aroused by history of sudden onset of epigastric pain radiating to the left hypochondrium, back or left should which is related to an episode of vomiting.

Early diagnosis is essential as Boerhaave's is rapidly fatal if not treated early.[4] Plain radiographs of the chest and neck should be obtained first. Rupture may initially be confined to the mediastinum. Air can then dissect up into the soft tissues of the neck causing crepitance of the soft tissues. After several hours the process spreads into the pleural cavity and a pleural effusion or hydropneumothorax will be seen. Most of the fluid present is secondary to irritation rather than representing esophageal or gastric contents. Therefore, plain film radiographic signs of perforation will include pneumomediastinum, subcutaneous emphysema of the neck, and pleural effusion or hydropneumothorax, most frequently on the left. The chest x-ray may be normal, especially early.[1] Retroperitoneal air may be seen if perforation of the abdominal esophagus has occurred.[5]

The next diagnostic procedure should be an esophagram. This is especially important with strong clinical suspicion and a normal chest x-ray. The esophagram will confirm the presence of a tear and help determine its location and extent. Water-soluble contrast should be used first. If no extravasation is seen, a barium exam should follow.[4]

Treatment of spontaneous esophageal rupture is surgical. If the rupture is restricted to the abdominal esophagus, conservative treatment can be used with good results.[1, 5]

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PERINATAL PAGE

Antenatal Nutrition

MAXINE M. BURCH, M.S.N., R.D.
Department OB-GYN, Creighton University

The approach to dietary compliance in care and outcome of pregnancy has fallen short of desired goals for producing optimum weight newborns (from the low birth weight infant to the macro weight infant). The role of physicians to supervise the growth of a healthy fetus has not been professionally delineated. The result is that medical care does not routinely address nutrition, and we are faced with handling the resultant accidents.

An overall review of the components of an antenatal nutrition educational base follows. The assigned responsibility of how to obtain needed nutrients in meals via tamales, non-lactose containing foods or the less traditional vegetarian approach lies in the skill of the nutrition professional with knowledge of grocery store food composition. All nutrient carriers (foods) can be used. The newest high tech measurements are used in illness;[1] each pregnant woman deserves the same assistance in learning to grow healthy babies.

Guidelines To Antenatal Nutrition

Preparation of the body mass to reproduce is of primary importance. Conditions for optimum reproduction are:

1. An appropriate height and weight ratio;
2. A fully mature body free to share nurturing with a fetus;
3. A body free of infections so that body can support desirable development.
4. A physical ecological system free of pollution, i.e., drugs.
5. General guidelines for eating practices during pregnancy cognizant of cultural practice.[2]

In the United States, the average birth weight is expected to be 7.0 to 7.5 pounds. To produce this infant, the products of pregnancy (fetus, placenta, amniotic fluid, increased blood and fluids, uterus, breast enlargement) are expected to be 20 to 24 pounds. The expected body mass change will vary dramatically depending upon maternal height and weight at conception.[3]

The work of reproduction by the female body must be considered. It is not a consideration of weight gain. It is a percentage of weight change in relationship of the woman's body mass prior to pregnancy and the woman plus the pregnancy demands. The restrictive concept of one pound per month for the first three months followed by two pound per month until delivery does not speak to the dynamics of cellular development. Appropriate nutrients for desirable embryonic development of the physical and neurological

Products/ Preg.	Preconception Female Weight	Ratio	%Increase
20 lbs.	80 lbs.	1:4	25
20 lbs.	100 lbs.	1:5	20
20 lbs.	120 lbs.	1:6	16.6
20 lbs.	140 lbs.	1:7	14.3
20 lbs.	160 lbs.	1:8	12.5
20 lbs.	180 lbs.	1:9	11.1

Table 1

Daily Nutritional Prescription for the Pregnant Female

Specifications — Average Build

Age 20-35 years*
Ht 64" ± Wt 130 ± (60 kg)

Nutrients	Grams	Desired No. of Calories	% of Total Calories	Minimum No. of Calories	% of Total Calories
Protein	90-100	400	18.2	360	17.7
Fat	70- 75	675	30.7	630	31.0
CHO	260-280	1120	51.0	1040	51.2
Total Calories		2195	99.9	2030	99.9
Rounded Figures		2200	100.0	2000	100.0

*For the pregnant teenager a 10% increase should be added to the figures above Multiple births also increase nutritional requirements of pregnancy.

Table 2
Daily Nutritional Prescription for the Pregnant Female
Vitamins and Minerals

Calcium	1200 mg.	Folic Acid	0.8 mg.
Iron	12 mg.	Thiamine	1.4 mg.
Magnesium	400 mg.	Riboflavin	2.0 mg.
Vitamin A	8000 IU	Niacin	20.0 mg.
Vitamin D	400 IU	Vitamin B6	10.0 mg.
Vitamin E	30 IU	Vitamin B12	12.0 mg.
Vitamin C	60 mg.		

systems at specific times must be available. Proliferation of cellular masses both in quantity and quality at the right time are of primary importance to produce a healthy baby.

Critical to optimum health in pregnancy is adequate water intake in the range of six to ten (8 oz.) glasses per day. Fifteen to twenty-five grams of food source fiber is recommended. Fiber relates to the complex carbohydrate sources.

The total food may be distributed in a three, five, six, or seven meal frequency. Food should be distributed over a minimum of 15 hours out of 24 hours from first to last meal and/or snack.

Physician's General Guidelines — Eating Practices in Pregnancy

a) Find out what the person is already doing. "If it works, don't fix it". Too many times women have been **told what to do,** which in fact, has been less effective for that person than what she was doing or knew how to do.

b) Asking a person "Do you eat well?" or "Do you eat a balanced diet?" is naive and far less perceptive than what the health scientist of today should accept as quality care.

c) **All teenage** females should be interviewed and counseled by a trained dietitian. The high risk nature of the outcome of pregnancy (a low birth weight infant by dates or low birth weight for gestational age) is a formidable problem which must be recognized and overcome. The cost factors of **intensive care nursery** and **days of hospitalization** make this a high priority. Also important is the quality of life for the infant and family in long term care.[4,5]

d) Any chronic or acute condition needs to be treated with documented follow-up, i.e., diabetes mellitus, hypertension, anemia, epilepsy, prior phenylketonuria or obesity.

e) Obesity is not synonymous with well nourished. It is overtly abnormal and often indicates a blatantly deficient or excessive nutrient intake pattern.

f) Consideration must be allowed for cigarettes, alcohol and drugs, which alter the metabolism of nutrients ingested, prior to or during pregnancy. Any pica pattern should be delineated and managed.

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President's Page

We hear much about the image of the medical profession in the eye of the public. Historically, the physician has always been held in high esteem by the public.

With the progress in technology and the tendency for more sub-specialty care, and consequently, less total family contact, the patient has less opportunity to get to know and relate to his or her physician. Ironically, while we are offering better total care to the patient, we have tended to lose some of the favorable image we have enjoyed in the past.

The immediate past President of the NMA, Harrison Rogers, M.D., in his address at the inauguration of his successor, emphasized the need for physicians to become more involved in community activities. He mentioned that physicians should consider giving 10 percent of their time for such activities.

Hiram R. Walker, M.D.

At first glance, this would appear to be quite a sacrifice for a busy physician to make. However, we can all bring to mind, some of our members who are consistently involved in such activities to that extent, or more. Invariably, these are physicians, with a heavy demand on their time from their practices, who still find time to assume responsibility and become involved in their communities.

We may have a tendency, at times, to be reluctant to engage in activities outside of the medical profession on the premise that our training and inclinations are more heavily weighted towards the fields of science rather than humanities. Physicians, through their extensive educational training, have much to offer for the betterment of the communities in which they live.

We and our families have the same basic interests as our patients in promoting good educational systems, good government, and a sound economic system in the communities in which we have chosen to live. Dedicated people are needed to serve on the Boards of Education, City Councils and Chambers of Commerce. Many times these positions are time consuming and the rewards seem few and far between. However, the personal satisfaction and the appreciation expressed for your efforts by fellow members of the community can be quite gratifying. Growing and prospering communities always appear to have a core of interested citizens who are continually striving for community betterment. The ones who excel usually have members of various professions among their leaders. Physicians have always held a position of respect, and if so inclined, are welcomed to positions of community service.

The main goal is for a better community in which to live and raise our families. The secondary gain is good public relations and projecting an image that benefits our entire profession.

Hiram R. Walker, M.D.
President

The Auxiliary

MEMBERSHIP

WHY BELONG TO MEDICAL AUXILIARY? Some people belong for the fellowship and the opportunity to share experiences, concerns and information with peers. Others join for the opportunity to provide community service and utilize their talents and skills. The need to keep informed and educated on issues encourages members to continue their support of the auxiliary.

There are many opportunities for involvement in programs, projects, and activities dealing with health related issues. Whether you are interested in legislation to improve health care or keeping abreast of medical auxiliary activities by reading state and national publications, your support is valued.

WON'T YOU PLEASE JOIN MEDICAL AUXILIARY? Your fringe benefit of involvement in health related activities is a feeling of accomplishment from serving the needs of others. We really can do more together.

Desta Osborne
Membership Chairman

MEMBERS AT LARGE

When living in an area that has no organized County Auxiliary, you as a member-at-large have direct contact with State and National Auxiliaries.

Information programs on child abuse, physical and mental fitness, drunken driving, teenage suicide, drugs, etc., are available for the asking. As a member-at-large, you have access to this wealth of information; use it to help your community to be better informed.

You receive the NMA Auxiliary Newsletter sharing what is happening in the state, "Facets" keeping you abreast of the national scene, and the opportunity to purchase AMA Accidental Death insurance.

Try to attend any state meetings you are able to; your input is needed. Please feel free to contact me with suggestions or questions you may have; I am here to represent you.

Dues for 1986-87 are $22.50 ($15.00 National and $7.50 State). Please fill out the form below and send to me with your check made payable to Nebraska Medical Auxiliary. Thank you.

Sally Becker
MAL Chairman

MEMBER AT LARGE

NAME ______________________________ Amount: $22.50

ADDRESS ______________________________ Phone __________

____

Mail to: Sally Becker
Route #1, Box 523
Norfolk, NE 68701

Creighton University News

DIRECTOR FOR C.U. PEDIATRIC INFECTIOUS DISEASE PROGRAM NAMED

Dr. Stephen A. Chartrand has been named director of the newly created Pediatric Infectious Disease Division at Creighton University School of Medicine.

Chartrand, 37, joined Creighton in July, becoming the first physician/researcher in the state with specialized training in pediatric infectious diseases. He also will serve as an associate professor in the university's departments of pediatrics and medical microbiology.

As director of the Pediatric Infectious Disease Division, Chartrand will be involved in the research and treatment of a variety of serious illnesses afflicting children.

"Creighton already enjoys an international reputation for it's expertise in microbiology research. We hope to achieve the same level of recognition in pediatric infectious disease and, at the same time, offer a new service to the Omaha medical community," Chartrand said.

The Pediatric Infectious Disease Division will not be in competition with private-practice physicians, he stressed.

"We plan to act as a consultant to area pediatricians when they need assistance with difficult or puzzling cases," he said. "All of our patients will be referred to us by their private physicians and eventually will be turned back to those doctors."

At Creighton, Chartrand plans to expand on his previous research in cystic fibrosis, bacterial meningitis and infectious disease found in day-care settings. He also will continue his clinical testing of a chicken pox vaccine, which could become the first such vaccine on the U.S. market within the next two years, he said.

Chartrand is the first of three specialists to be hired for the Pediatric Infectious Disease Division, located in Creighton's Department of Pediatrics at Saint Joseph Hospital. Recruitment efforts for a second physician are scheduled to begin in October.

Prior to his Creighton appointments, Chartrand was an assistant professor and director of the pediatric infectious disease division at the University of South Alabama in Mobile, 1983-1986. He also was assistant director of the university's cystic fibrosis center, 1984-1986.

A 1975 graduate of the University of Kansas School of Medicine in Kansas City, Chartrand completed a 2½-year fellowship in pediatric infectious disease at the University of Oklahoma School of Medicine in Oklahoma City in 1982.

Letter to the Editor

In the most recent issue of **Nebraska History** for Summer 1986, there is an article by Dr. John B. Davis of Omaha entitled, "The McCook, Nebraska, Letters of Dr. Byron B. Davis". In the article Dr. Davis describes the experiences of his grandfather during eight years of practice in McCook from 1885 to 1893 consisting primarily in letters written from McCook to his future wife in Beatrice. The letters give insight into the problems and hard work of practice in those days, and it might be good to mention this in the next edition of the Newsletter. Perhaps one could persuade the young geniuses who now practice to learn something about the heritage and traditions of those who preceded them. It might help them to learn these things and perhaps be a bit humble about how easily medicine can be practiced today.

Sincerely,
Warren Bosley, M.D.

Welcome New Members

James Shelton, M.D.
2924 South 122nd Ave.
Omaha, NE 68144

Charles M. Kelly, M.D.
7710 Mercy Rd., #500
Omaha, NE 68124

Samuel M. Cohen, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Ellen Golden, M.D.
555 No. 30th St.
Omaha, NE 68131

James Linder, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Larry M. Marcus, M.D.
555 No. 30th St.
Omaha, NE 68131

John F. Riedler, M.D.
7911 Wakeley Plaza
Omaha, NE 68114

Allan M. Rubin, M.D.
555 No. 30th St.
Omaha, NE 68131

Douglas M. Smith, M.D.
UNMC - 42nd & Dewey Ave.
Omaha, NE 68105

Dennis D. Weisenburger, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Lynne D. Willett, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

L. Jay McIntyre, M.D.
819 Dorcas
Omaha, NE 68108

John N. Walburn, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Larry A. Latson, M.D.
UNMC - 42nd & Dewey
Omaha, NE 68105

Coming Meetings

UNIVERSITY OF NEBRASKA

EMERGENCY MEDICINE REVIEW — Sept. 22-27 or Oct. 6-11, 1986. Course will provide physicians engaged in the evaluation and treatment of urgent and life threatening conditions with an in-depth

INFECTIOUS DISEASE SYMPOSIUM — Friday, October 24, 1986 at the Omaha Marriott Hotel, Omaha, Nebraska. Sponsored by the University of Nebraska Medical Center, Division of Immunology and Allergy and the Nebraska Chapter of the American Academy of Pediatrics. Credit: 5 Prescribed Hours of AAFP, 5 AMA Category I. Fee: TBA. For more information contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebraska 68105, Phone: (402) 559-4152.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE ALUMNI ASSOCIATION — Alumni Roundup and Reception in Omaha, Monday, October 27, 1986, 6:00 - 7:30 p.m., Red Lion Inn Ballroom; in conjunction with the Omaha Mid-West Clinical Society Postgraduate Assembly. Hors D'oeuvres and Cash Bar. All alumni, spouses, faculty and friends are cordially invited. Followed at 7:45 p.m. with a 50-year Dinner, Nebraska Room, Red Lion Inn. Class reunions will be held in Omaha in late October for classes ending in "6" and "1".

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

33RD ANNUAL SCIENTIFIC MEETING - NEBRASKA OB-GYN SOCIETY — December 4, 5, 6, 1986 at the MGM Grand Hotel, Las Vegas, Nevada. 9 Hours Credit. Fee: $200. Contact: Dennis Beavers, M.D., 720 N. 87th Street, Omaha, Nebraska 68114, (402) 390-1200.

7TH ANNUAL MEDICAL & SKI CONFERENCE — "Diagnostic Dilemmas: The Approch and the Answers" — February 15-19, 1987 at the Keystone Conference Center, Keystone, Colorado. Sponsored by the Univeristy of Nebraska College of Medicine Department of Internal Medicine. Program is being offered to physicians at the same time that the College of Nursing is offering a nursing ski conference and the College of Dentistry will be offering their annual Dental Ski Conference. Approved for 16 hours of AMA Category I and AAFP prescribed hours. For more information contact Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telphone (402) 559-4152.

36TH ANNUAL OB-GYN CONFERENCE — March 12-13, 1987 at the Holiday Inn Central, Omaha, Nebraska. Fee: TBA. Contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, Omaha, Nebraska 68105. (402) 559-4152.

FAMILY PRACTICE REVIEW - A COMPREHENSIVE UPDATE — March 30-April 10, 1987 and April 27-May 8, 1987 at Omaha, Nebraska. Sponsored by the University of Nebraska College of Medicine. Registration Fee: $850. (One week registration available with special arrangements). Contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebrask 68105. Phone: (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

UPCOMING UNMC CONTINUING EDUCATION COURSES

ADVANCED CARDIAC LIFE SUPPORT — Oct. 14, 1986 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Oct. 22-23, 1986 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Nov. 17, 1986 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Dec. 3-4, 1986 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Jan. 13-14, 1987 — Initial Certification Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 10, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 11, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Mar. 10-11, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Apr. 15, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 18-19, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 20, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — June 1, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

For further information, contact Ann Fitzgerald, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152. In Nebraska, call: 800-228-1095. All other states (except Alaska), call: 800-228-9630.

LANCASTER COUNTY MEDICAL SOCIETY

"CLINICAL UPDATE - II—November 8, 1986 (Saturday), Villager Convention Center, 5200 "O" St. - Lincoln, NE. This "Clinical Update - II" will be a continuing medical education program designed to address and update the care of patient health care problems presenting in primary care M.D. offices on a day-to-day basis. It is anticipated that the program will be reviewed and accepted for 6 prescribed hours by the American Academy of Family Practice. As an organization accredited for continuing medical education, the medical education committee - Lancaster County Medical Society designates this continuing medical education activity as meeting the criteria for 6 credit hours in category I of the Physicians Recognition Award of the American Medical Association. Contact: P. D. Duensing, Ed.D. - Executive Secretary, Lancaster County Medical Society, (402) 474-2405.

NATIONAL JEWISH CENTER FOR IMMUNOLOGY AND RESPIRATORY MEDICINE

TRIBUTE TO HYMAN CHAI, M.D. — January 10-14. National Jewish Center for Immunology and Respiratory Medicine Keystone Summit at Keystone, Colorado. Topics: Allergy, Asthma, Pharmacology, Advances in Immunology, Diagnostic Testing and more. Fee: $325. $165 for Allied Health and Physicians in Training. 15.5 hours of AMA Category 1 Credit. For more information contact: Jeri Wagner, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206. 303-398-1000.

NEBRASKA METHODIST HOSPITAL

ANNUAL HOWARD B. HUNT CANCER SEMINAR: ENVIRONMENT AND CANCER, UPDATE ON AIDS, LASER THERAPY FOR CANCER — October 10, 1986 - all day seminar - Nebraska Methodist Hospital - 8303 Dodge Street - Omaha, Nebraska 68114 - No registration fee - For further information call - 402-390-4035.

CREIGHTON UNIVERSITY

MEDICINE UPDATE — Oct. 10-12 at Saint Joseph Hospital, Omaha, Nebraska. Hours TBA. Fee TBA.

OMAHA MID-WEST CLINCIAL SOCIETY — Oct. 27-29 at the Red Lion Inn, Omaha, Nebraska. Hours 23. Fee TBA.

THE HEART OF THE MATTER — Oct. 10-11, 1986 — Saint Joseph Hospital, Omaha, Nebraska. Guest faculty scheduled. 12.5 credit hours in Category 1. 12.5 Prescribed hours A.A.F.P. Registration fee $175.00 (single day $100).

CURRENT CONCEPTS IN OPHTHALMOLOGY — Dec. 6, 1986 — Marriott Hotel, Omaha, Nebraska. Program Director: Ira Priluck, M.D.

1987

CORONARY HEART DISEASE AND HYPERTENSION — Feb. 1-6, 1987 — Freeport, Bahamas. 28 credit hours in Category 1. 28 Prescribed hours A.A.F.P. Registration fee $375.00 prior to Nov. 1; $450.00 after Nov. 1, 1986.

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17, 1987 — Wyndham Rose Hall Beach Motel, Montego Bay, Jamaica. 24 credit hours in Category 1. Enrollment limited to 20. Registration fee $475.00.

ADVANCES IN ANTITHROMBOTIC THERAPY — Mar. 14, 1987 — Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

FLORIDA TUTORIAL (OB-GYN) — Mar. 26-27, 1987, Airport Marriott Hotel, Orlando, Florida, Program Director: Gilles R.G. Monif, M.D.

THE ROLE OF ECHOCARDIOGRAPHY IN THE DIAGNOSIS AND MANAGEMENT OF CARDIAC EMERGENCIES — Apr. 10-11, 1987, Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

MAURICE E. GRIER SYMPOSIUM (OB-GYN) — June 6, 1987, Marriott Hotel, Omaha, Nebraska. Program Director: James W. Daly, M.D.

For further information or to register, contact: Creighton University School of Medicine Division of CME, Omaha, NE 68178, 402-280-2550 or outside Nebraska Toll Free 800-228-7212, Ext. 2550.

BOONE HOSPITAL CENTER

THE ETHICAL DILEMMA, LIMITED RESOURCES — DIFFICULT DECISIONS — Oct. 17, 1986 — Boone Hospital Center, Columbia, Missouri. This conference will bring nationally recognized authorities in medical ethics to discuss issues that are currently challenging a variety of healthcare disciplines. Cost: $70 for physicians, $50 for other disciplines and one-half price for students. Credit: 6 hours in Category 1 of the Physicians Recognition Award of the American Medical Association. To register: phone Boone Hospital Center's Affiliated Services, Columbia, Missouri (314) 875-3712.

1986 NATIONAL INSTITUTE ON HEALTH CARE LEADERSHIP AND MANAGEMENT — Nov. 17-21, 1986 — Marriott's Grand Hotel Resort, Point Clear, Alabama. A nine course selection in advanced leadership training. 14-28 CME credits. For more information please contact Sherry Mason, American Academy of Medical Directors, 4830 W. Kennedy Blvd., Suite 648, Tampa, FL 33609, telephone (813) 873-2000.

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

MEDICINE AND RELIGION: ETHICS OF SEXUALITY AND REPRODUCTION — October 21-22, 1986. Sponsored by the University of Kansas Medical Center. Location Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas 66103. Credit: AMA Cat 1, AAFP, SW, CNE. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480

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AMERICAN CANCER SOCIETY: PEDIATRIC ONCOLOGY SYMPOSIUM — October 17, 1986. Sponsored by the University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103 and the American Cancer Society - Kansas Division, Inc. Credit: AMA Cat 1, AAFP, CNE, SW, PT. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Carole Rosen, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4480.

LEGAL MEDICINE: THE NEW SOLUTION — Jan. 18-24, 1987 — Sponsored by University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Location: Puerto Vallerta, Mexico. 16 Category I AMA, AAFP credit hours.Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

INTERNAL MEDICINE SYMPOSIUM — Mar. 1-7, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. 18 Category I AMA, AAFP credit hours. Location: Cancun, Mexico. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

37TH ANNUAL ANESTHESIOLOGY SYMPOSIUM — Apr. 24-26, 1987 — Sponsored by the University of Kansas Medical Center. Location: Crown Center Hotel, Kansas City, Missouri. Credit: AMA, AAFP, AANA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

SAM E. ROBERTS NUTRITION — Mar. 31, 1987 — University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

PEDIATRICS — Apr. 2-3, 1987 — Sponsored by the University of Kansas Medical Center. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

COMMON PROBLEMS IN GASTROENTEROLOGY — Mar. 16, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP. Location: TBA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

KANSAS MEDICINE — May 15, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA and AAFP. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

WHAT'S NEW IN DIABETES — Apr. 1, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th & Rainbow, Kansas City, KS. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

SCHEDULED MEETINGS

54TH ANNUAL POSTGRADUATE ASSEMBLY — Omaha Mid-West Clinical Society, October 27, 28 and 29, 1986 at The Red Lion Inn/Omaha. For information, please contact: Miss Lorraine E. Seibel, Executive Secretary, Omaha Mid-West Clinical Society, 7363 Pacific Street, #205-B, Omaha, Nebraska 68114.

AMA News Notes

New guidelines for hospital construction are being developed by the American Institute of Architects. A 30-member task force already has met several times to provide advice on revisions. Of concern to the AMA is a proposal to remove the requirement that nursing stations in critical care units provide for direct patient viewing by nurses on duty. The AMA, which is represented on the task force, will oppose the proposed change.

* * *

International conference on non-military radiation emergencies will be sponsored by the AMA Nov. 19-21 in Washington, D.C. The program, which also will include a workshop for physician spokespersons, is part of a new AMA endeavor to stimulate medical society and physician involvement in planning and organizing to prevent and immediately respond to non-military radiation emergencies like those at Three Mile Island and Chernobyl.

Earlier this year, the AMA established a seven-member Advisory Committee on Non-military Radiation Emergencies. That group now is developing an action plan to increase physician involvement at the community level through state and county medical societies, and to improve awareness of the fact that physicians are expert resources for government agencies and the media.

Conference speakers will include emergency health planners, radiation risk and public health experts, social psychologists, and media representatives. The conference will be followed on Friday afternoon, Nov. 21, by a communications skills workshop for physicians interested in contributing to improved public and media understanding of radiation issues. Workshop attendance will be limited.

Conference details are available by calling (800) 621-8335; in Illinois the number is (312) 645-4987.

* * *

Despite one apparent defeat after another, efforts to resurrect the Health Planning Act continue in Congress. The AMA in turn is developing new strategies aimed at terminating a program that it has contended is costly and unproductive as well as a potential target for elimination under the Gramm-Rudman budget reconciliation act. The newest effort to keep the program alive is being sponsored by Rep. Jim Chapman (D. Texas), who has introducted a bill to keep the program going for another year.

Earlier, Congress had cut funding for the planning program from $56 million to $28 million in what was clearly intended as a phase-out maneuver.

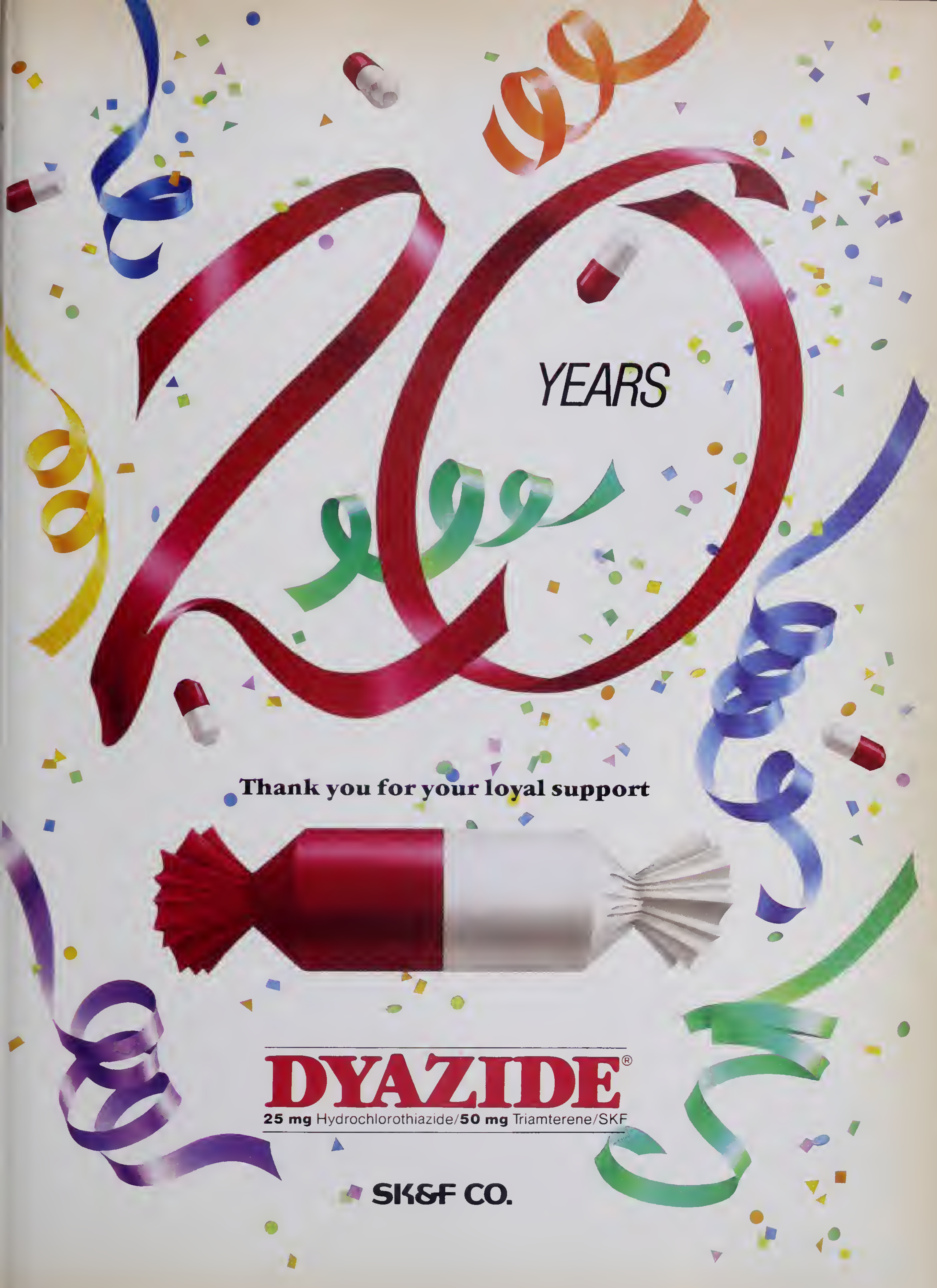
* * *

The speaker of the AMA House of Delegates, James E. Davis, M.D., is the editor of **Major Ambulatory Surgery,** a reference work covering development of the unit, patient care, major ambulatory surgical specialties, and other considerations.

Dr. Davis, of Durham, N.C., is a surgeon who has planned, built, and operated both a hospital-based and a freestanding ambulatory surgery unit; he has worked and published in the field for the past 15 years. He predicts that "as our technology continues to expand, as the need for more cost-effective health care continues to be more important, and as more patients understand the comfort and safety of this method of delivering surgical care, the number of procedures done each year, the number of different types of operative procedures, the number of patients involved, and the number of facilities offering this service will continue to grow."

Copies of the 494-page book are $69.50 ($78 outside the United States and Canada) and may be ordered by phone from the publisher, Williams & Wilkins, by calling (800) 638-0672. Maryland callers should call (301) 528-4221, collect.

* * *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PREMARIN®
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Now the evidence looks better than ever

Significantly reduced risk of endometrial hyperplasia

Endometrial hyperplasia was significantly reduced when progestin was added to PREMARIN therapy for more than ten days a month.[1-4] The risk of endometrial hyperplasia may also be reduced through cyclic administration of unopposed, low-dose PREMARIN.

Effect on lipids—an important feature

PREMARIN used alone does not adversely affect lipid levels. In fact, a clinical study has shown a significant increase in HDL cholesterol—from 49.7 mg/dL to 56.4 mg/dL—and decrease in LDL cholesterol—from 165.1 mg/dL to 138.1 mg/dL—after one year of therapy with PREMARIN, 0.625 mg.[5]

Low-dose control of menopausal symptoms*

PREMARIN effectively relieves vasomotor symptoms, such as hot flashes. When estrogen deficiency is limited to atrophic vaginitis, PREMARIN® (conjugated estrogens) Vaginal Cream restores the vaginal environment to its premenopausal state.

The most widely used, most extensively studied estrogen worldwide.

PREMARIN®

(Conjugated Estrogens Tablets)

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*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary of prescribing information.

For moderate-to-severe vasomotor symptoms

PREMARIN®

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0.3 mg 0.625 mg 0.9 mg 1.25 mg 2.5 mg

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For atrophic vaginitis

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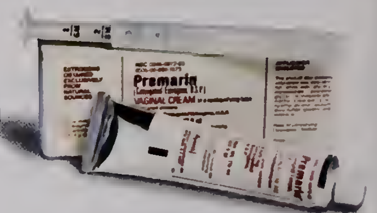

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.

Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration; it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy. There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses.

2. ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.

The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring. It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix. Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000. In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters. Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause. (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions.) **Osteoporosis (abnormally low bone mass)**. Atrophic vaginitis. Kraurosis vulvae. Female castration.

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized. Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia. Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes. Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens. (See PRECAUTIONS.) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1. Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease. 2. Known or suspected estrogen-dependent neoplasia. 3. Known or suspected pregnancy (See Boxed Warning). 4. Undiagnosed abnormal genital bleeding. 5. Active thrombophlebitis or thromboembolic disorders. 6. A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver. There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans. (See Boxed Warning.) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility. There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens.

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement; it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement. Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction. Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users. An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives. If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization. Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use. They should be used with caution in patients with cerebral vascular or coronary artery disease. Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis. When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk.

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives. For this reason, diabetic patients should be carefully observed. Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases.

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed. Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation. Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding, mastodynia, etc. Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed. Preexisting uterine leiomyomata may increase in size during estrogen use. The pathologist should be advised of estrogen therapy when relevant specimens are submitted. If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated. Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete. If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism.

The following changes may be expected with larger doses of estrogen:

a. Increased sulfobromophthalein retention.

b. Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3; increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay. Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered.

d. Impaired glucose tolerance.

e. Decreased pregnanediol excretion.

f. Reduced response to metyrapone test.

g. Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration. As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk.

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives: breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea; premenstrual-like syndrome; amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued; erythema multiforme; erythema nodosum; hemorrhagic eruption, loss of scalp hair; hirsutism; steepening of corneal curvature, intolerance to contact lenses, headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido.

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females.

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term use only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible. Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals.

2. *Given cyclically:* Female castration. Osteoporosis. Female castration—1.25 mg daily, cyclically. Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control. Osteoporosis—0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use only. For treatment of atrophic vaginitis or kraurosis vulvae.

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible.

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals.

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition.

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding.

References:

1. Whitehead MI, Townsend PT, Pryse-Davies J, et al: Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium. *N Engl J Med* 1981;305:1599-1605. **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric. *Br Med J* 1980;280:822-824. **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women. *Obstet Gynecol* 1985;67:496-499. **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women. *Semin Reprod Endocrinol* 1983;1:1,41-52. **5.** Barnes RB, Roy S, Lobo RA: Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women. *Obstet Gynecol* 1985;66:216-219.

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ORGANIZATIONS, STATE

American Cancer Society, Nebraska Division, Inc.
Don W McClure, Exec Vice President
8502 West Center Rd., P.O. Box 241255, Omaha 68124-5255

American Diabetes Association — Nebraska Affiliate, Inc.
Ron Van Ryswyk, Executive Director
7377 Pacific St., Ste. 216A. Omaha 68114

American Heart Association, Nebraska Affiliate
Dennis N. Nissen, Executive Director
3624 Farnam St., Omaha 68131

American Lung Association of Nebraska
8901 Indian Hills Dr., Ste. 107, Omaha 68114

American Red Cross
P.O. Box 83267
1701 "E" St., Lincoln 68501

Arthritis Foundation, Nebraska Chapter, Inc.
Mrs. Ellen Wright, Exec. Director
2229 N. 91st Court, Omaha 68134

Blue Cross and Blue Shield of Nebraska
Wm. H. Heavey, President
P.O. Box 3248, Main Station, Omaha 68180

Creighton University School of Medicine
Richard O'Brien, M.D., Dean
California at 24th St., Omaha 68178

Cystic Fibrosis Foundation, Nebraska Chapter
Charles R. Bercaw, Exec. Director
5017 Leavenworth St., Omaha 68106

Dairy Council of Central States, Inc.
Suite 103, Hillcrest Bldg.
76th & Main, Ralston 68127

Division of Rehabilitation Services
Nebraska Department of Education
6th Floor, 301 Centennial Mall South, Lincoln 68509

Division of Rehabilitation Services for the Visually Impaired
James S. Nyman, Ph.D., Director
4600 Valley Road. Lincoln 68510

Easter Seal Society of Nebraska
Mrs. Letitia K. Simmons, Executive Director
3015 North 90th St., #6, Omaha 68134

Health Manpower Referral Service, State of Nebraska
3rd Floor, State Office, 301 Centennial Mall South
Lincoln 68509

Lincoln Council on Alcoholism and Drugs, Inc.
Room 212, 215 Centennial Mall, Lincoln 68508

March of Dimes — Birth Defects Foundation
1618 L Street, Lincoln 68508

MID-PLAINS POISON CONTROL CENTER
Childrens Memorial Hospital, 8301 Dodge St., Omaha 68114
(402) 390-5400 or 800-642-9999 (toll free Nebraska)

Missouri Valley Dermatologic Society
Richard Q. Crotty, M.D., Secretary
7822 Davenport St., Omaha 68114

Muscular Dystrophy Association
1912 No. 90th St., Lower Level, Omaha 68114

National Kidney Foundation of Nebraska
Karen Engelsman, Executive Director
2217 No. 91st Plaza, Omaha 68134
(402) 397-9234 — NE toll free 800-642-1255

National Multiple Sclerosis Society — Nebraska-Iowa Midlands Chapter
3624 Leavenworth, Omaha 68105

National Society to Prevent Blindness, Nebraska Affiliate
120 North 69th St., Suite 203, Omaha 68132-2720

Nebraska Academy of Ophthalmology
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AMA News Notes

(Continued from page 11A)

AMA was instrumental in defeating draft proposals for physicians, and now seeks a voluntary solution to physician shortages being experienced by the uniformed services.

* * *

AMA's new wholly-owned investment subsidiary, AMA Advisers, Inc., is in business. Final approval for the AMA's acquisition of PRO Services was approved by PRO Mutual Funds, and the 20-year-old firm, which has $174 million of assets under management, was renamed AMA Advisers Inc.

The firm continues to be based in Blue Bell, Pa.; a Chicago branch office has been formed. Through AMA Advisers Inc., the AMA will offer investment services to AMA members, other physicians, and the general public.

AMA Executive Vice President James H. Sammons, M.D., said the subsidiary's mission is "to provide investment products and services of exceptional quality to its clients and to help generate revenues that help support the work of the AMA."

* * *

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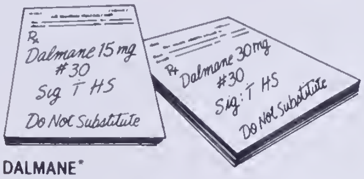
References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971. **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al: Clin Pharmacol Ther 32*:781-788, Dec 1982. **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984. **9.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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THE NEBRASKA MEDICAL JOURNAL

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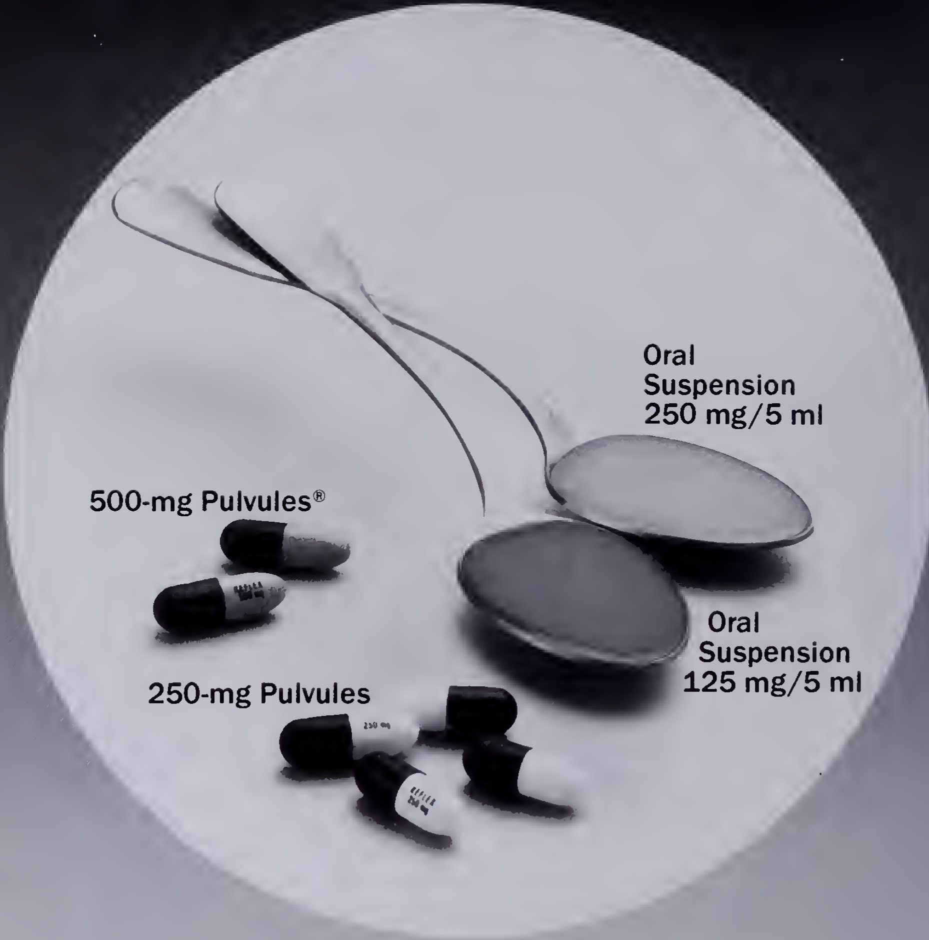

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EDITOR —
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5505 Ellendale Road,
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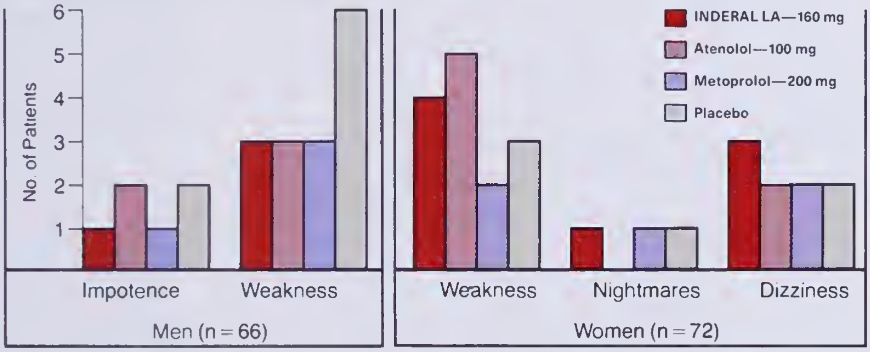

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Propranolol hydrochloride (INDERAL® LA): Propranolol is contraindicated in. 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with propranolol.

Hydrochlorothiazide: Hydrochlorothiazide is contraindicated in patients with anuria or hypersensitivity to this or other sulfonamide-derived drugs

WARNINGS

Propranolol hydrochloride (INDERAL® LA): CARDIAC FAILURE Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated, and are receiving digitalis and diuretics Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or propranolol should be discontinued (gradually, if possible)

> IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction following *abrupt* discontinuance of propranolol therapy. Therefore, when discontinuance of propranolol is planned the dosage should be gradually reduced and the patient carefully monitored In addition, when propranolol is prescribed for angina pectoris, the patient should be cautioned against interruption or cessation of therapy without the physician's advice If propranolol therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute propranolol therapy and take other measures appropriate for the management of unstable angina pectoris Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker In one case this resulted after an initial dose of 5 mg propranolol

MAJOR SURGERY The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures

Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD, IN GENERAL, NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution, since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes In these patients, it may be more difficult to adjust the dosage of insulin Hypoglycemic attacks may be accompanied by a precipitous elevation of blood pressure.

Hydrochlorothiazide: Thiazides should be used with caution in severe renal disease In patients with renal disease, thiazides may precipitate azotemia In patients with impaired renal function, cumulative effects of the drug may develop.

Thiazides should also be used with caution in patients with impaired hepatic function or progressive liver disease, since minor alterations of fluid and electrolyte balance may precipitate hepatic coma

Thiazides may add to or potentiate the action of other antihypertensive drugs Potentiation occurs with ganglionic or peripheral adrenergic-blocking drugs

Sensitivity reactions may occur in patients with a history of allergy or bronchial asthma

The possibility of exacerbation or activation of systemic lupus erythematosus has been reported

PRECAUTIONS

Propranolol hydrochloride (INDERAL® LA): GENERAL Propranolol should be used with caution in patients with impaired hepatic or renal function Propranolol is not indicated for the treatment of hypertensive emergencies

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure Patients should be told that propranolol may interfere with the glaucoma screening test Withdrawal may lead to a return of increased intraocular pressure

CLINICAL LABORATORY TESTS Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase

DRUG INTERACTIONS Patients receiving catecholamine-depleting drugs, such as reserpine, should be closely observed if propranolol is administered The added catecholamino-blocking action may produce an excessive reduction of resting sympathetic nervous activity, which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension

CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential In 18-month studies, in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug

PREGNANCY Pregnancy Category C. Propranolol has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximal recommended human dose There are no adequate and well-controlled studies in pregnant women. Propranolol should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

NURSING MOTHERS: Propranolol is excreted in human milk Caution should be exercised when propranolol is administered to a nursing mother

PEDIATRIC USE. Safety and effectiveness in children have not been established

Hydrochlorothiazide: GENERAL Periodic determination of serum electrolytes to detect possible electrolyte imbalance should be performed at appropriate intervals

All patients receiving thiazide therapy should be observed for clinical signs of fluid or electrolyte imbalance, namely: Hyponatremia, hypochloremic alkalosis, and hypokalemia Serum and urine electrolyte determinations are particularly important when the patient is vomiting excessively or receiving parenteral fluids Medication such as digitalis may also influence serum electrolytes Warning signs irrespective of cause are: Dryness of mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pains or cramps, muscular fatigue, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting

Hypokalemia may develop, especially with brisk diuresis, when severe cirrhosis is present, or during concomitant use of corticosteroids or ACTH

Interference with adequate oral electrolyte intake will also contribute to hypokalemia Hypokalemia can sensitize or exaggerate the response of the heart to the toxic effect of digitalis (eg, increased ventricular irritability). Hypokalemia may be avoided or treated by use of potassium supplements, such as foods with a high potassium content

Any chloride deficit is generally mild and usually does not require specific treatment except under extraordinary circumstances (as in liver or renal disease) Dilutional hyponatremia may occur in edematous patients in hot weather, appropriate therapy is water restriction, rather than administration of salt, except in rare instances when the hyponatremia is life-threatening In actual salt depletion, appropriate replacement is the therapy of choice

Hyperuricemia may occur or frank gout may be precipitated in certain patients receiving thiazide therapy

Insulin requirements in diabetic patients may be increased, decreased, or unchanged Diabetes mellitus which has been latent may become manifest during thiazide administration.

If progressive renal impairment becomes evident, consider withholding or discontinuing diuretic therapy

Thiazides may decrease serum PBI levels without signs of thyroid disturbance

Calcium excretion is decreased by thiazides Pathologic changes in the parathyroid gland with hypercalcemia and hypophosphatemia have been observed in a few patients on prolonged thiazide therapy. The common complications of hyperparathyroidism, such as renal lithiasis, bone resorption, and peptic ulceration, have not been seen Thiazides should be discontinued before carrying out tests for parathyroid function.

DRUG INTERACTIONS: Thiazide drugs may increase the responsiveness to tubocurarine

The antihypertensive effects of thiazides may be enhanced in the postsympathectomy patient Thiazides may decrease arterial responsiveness to norepinephrine This diminution is not sufficient to preclude effectiveness of the pressor agent for therapeutic use

PREGNANCY Pregnancy Category C Thiazides cross the placental barrier and appear in cord blood The use of thiazides in pregnancy requires that the anticipated benefit be weighed against possible hazards to the fetus. These hazards include fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult

NURSING MOTHERS Thiazides appear in human milk If use of the drug is deemed essential, the patient should stop nursing

PEDIATRIC USE Safety and effectiveness in children have not been established

ADVERSE REACTIONS

Propranolol hydrochloride (INDERAL® LA): Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy

Cardiovascular Bradycardia, congestive heart failure, intensification of AV block, hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type

Central Nervous System Lightheadedness, mental depression manifested by insomnia lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances, hallucinations, an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss; emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics

Gastrointestinal Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea constipation, mesenteric arterial thrombosis, ischemic colitis

Allergic Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress

Respiratory Bronchospasm

Hematologic Agranulocytosis; nonthrombocytopenic purpura, thrombocytopenic purpura

Auto-Immune In extremely rare instances, systemic lupus erythematosus has been reported

Miscellaneous Alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely Oculomucocutaneous reactions involving the skin, serous membranes, and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol

Hydrochlorothiazide:

Gastrointestinal Anorexia, gastric irritation, nausea, vomiting, cramping, diarrhea, constipation, jaundice (intrahepatic cholestatic jaundice), pancreatitis, sialadenitis

Central Nervous System Dizziness, vertigo, paresthesias, headache, xanthopsia

Hematologic Leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia

Cardiovascular Orthostatic hypotension (may be aggravated by alcohol, barbiturates or narcotics)

Hypersensitivity Purpura, photosensitivity, rash, urticaria, necrotizing angiitis (vasculitis, cutaneous vasculitis), fever, respiratory distress, including pneumonitis, anaphylactic reactions

Other Hyperglycemia, glycosuria, hyperuricemia, muscle spasm, weakness restlessness, transient blurred vision

Whenever adverse reactions are moderate or severe, thiazide dosage should be reduced or therapy withdrawn

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REFERENCE:

1. Ravid M, Lang R, Jutrin I The relative antihypertensive potency of propranolol oxprenolol, atenolol, and metoprolol given once daily *Arch Intern Med* 1985,145 1321 1323

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THE NEBRASKA MEDICAL JOURNAL

Unified Membership

I. INTRODUCTION

. . . so I am going to talk to you today about a subject which we are not addressing as vigorously as I feel that we should, and that subject is membership—more specifically, unified membership.

The staff of the AMA has a superb membership department. They turn out beautiful brochures with all of the appropriate facts and the reasons for joining. But these are just not read and appreciated as they should be by the prospective member. The spoken word coming from a respected colleague is much more effective.

II. PAST HISTORY

A. From a high of 13 unified societies representing 40 percent of AMA members in the mid-60's, we went to a low in 1983 of two unified states accounting for only 9 percent of the total AMA membership (Illinois & Oklahoma).

During this period, our market penetration of total U.S. doctors as AMA members fell from a high of 74 percent to 44 percent—a fall of 30 percentage points.

B. There was increasing pressure from some members of the two unified states to deunify. In response, the house approved specific benefits to unified states and their members —

1. A 10 percent **discount** on AMA dues for as long as a state remains unified.
2. Postponement (for a period of one year) of any AMA dues increase voted the year of unification.
3. **Two** extra delegates and alternates to the AMA House of Delegates.
4. A specific **staff person** at the AMA to handle problems of members of unified states or its staff.
5. Increased **reimbursements** to unified state societies for collection of AMA dues.
6. A unified society **advisory** committee composed of representatives of all unified societies to meet with the executive committee of the board of trustees at the annual meeting.

III. CURRENT ACTIVITIES

A. In response to these benefits, five state medical societies in 1985 voted to adopt unified status. I hope and believe that others will do the same in 1986.

B. What can we as physician leaders do to help bring this about? In answer to that question —

1. **I start out with a basic overall conviction that there is no reasonable way a practicing physician can make a negative decision about joining the AMA if he or she knows the facts about what the AMA has done, is doing at the present time, and will continue to do on behalf of the physician and our patients.**
2. A correlary to that is that we are overusing the term "freeloaders." I don't like the term. I think those doctors who don't join the AMA are really "don't knowers." We have no right to label any of those people **freeloaders** until we have made a major effort to bring them the facts about the AMA. Most of them have been misinformed by the media.
3. The truth is that we have a **great** story to tell about the advantages and benefits of **AMA** membership, but we

WILLIAM S. HOTCHKISS, M.D.
Chairman, Board of Trustees, AMA
Leadership Conference, Chicago, IL 60610
February, 1986
2147 Old Greenbrier Road
Chesapeake, VA 23320

are simply not telling it often enough. How many of you have had a major AMA membership speech delivered in your local society or at your quarterly hospital meeting within the last three to five years? Very few, I am sure. And **that** is the problem.

4. I think I know doctors pretty well. I have worked with them all of my adult life. From medical school days, through residency, military service, in practice, and at all levels of organized medicine: — and doctors are not by nature freeloaders. If they can be made aware than an organization is rendering them a valuable service, in most cases they will support it. They are not looking for a free ride on the backs of their associates. They simply do not have the information.

5. So let us look at some of these benefits. I know you are leaders, and I know you are aware of most of them, but many of you will find some you hadn't thought of.

6. I find it advantageous to divide the benefits into tangible ones, which come only to the dues paying member and intangible benefits which accrue to every physician in the country whether he or she is a member or not.

C. THE TANGIBLE BENEFITS

1. Publications: The AMA is the largest publisher of scientific literature in the world.
   a. JAMA is the medical journal with the largest circulation in the world. In addition, it is published in seven foreign languages in foreign countries.
   b. There are nine specialty journals, and a choice of one is a membership benefit.
   c. The AMA News is the best newspaper by far on the socio-economic activities in medicine; all doctors should read it.

   Other publications are discounted to members.

   d. The AMA drug evaluation book, which has been through five or six editions, is without doubt the best practical pharmaceutical guide for the practicing physician and is used in every U.S. medical school.
   e. Pamphlets and brochures too numerous to mention are published. These cover such subjects as HMO's, PPO's, DRG's, and many others. Anyone who is considering an affiliation is well advised to secure the AMA publication and read it to avoid the pitfalls.
2. The Library: The AMA maintains the second largest medical library in the United States after the Library of Congress. For members, it provides free literature search (for which you would pay $30-$50 at your medical school) and free copies of the first five desired articles of reasonable length.
3. The insurance programs of the AMA are excellent and professionally selected. They include:
   a. Life Insurance
   b. Health Insurance
   c. Accident Insurance
   d. Office Overhead Insurance
4. There is an excellent credit card system with borrowing power.
5. The member's retirement plan is superb. There is both a fixed interest account and an equity account managed by Oppenheimer and Templeton, including two mutual funds ordinarily marketed with a substantial load but whose expertise is made available to AMA members without any load.
6. The AMACO Reinsurance System for professional liability is a membership benefit, but crosses the lines to benefit some non-members.
7. There is a substantial discount on Hertz Rent-A-Cars.
8. You get the benefit of advertising and investment income so that you receive $2 in service for $1 in dues. (The dues provide less than half of our annual budget.)

These are good benefits—excellent ones. They are selected with the help of outside consulting experts. If you take advantage of them, you can save substantial monies.

Even so, I am not going to argue too vigorously that the tangible benefits **alone** are worth the dues of $375 to every doctor. I know that some of these are available through your local, state and specialty societies, and through some groups. They may not be quite as good, but they may suit your purposes well.

This leads to a statement of which I am absolutely convinced — and that is the **intangible** benefits provided by the AMA are by far more valuable to the physician and to our patients.

D. The **intangible benefits.** These go to all physicians whether they are AMA members or not. The vast majority of the nonmembers and even many members are unaware of how much has been done and is being done for them.

1. The KEOGH Retirement Plan: No review would be complete without mentioning the **KEOGH Retirement Plan.** I'm not talking about the investment vehicle which is available to members, but about the enabling legislation passed over two decades ago after several years of vigorous lobbying by the AMA. Before that event there was no means for a self-employed physician to shelter any of his income for retirement purposes. Before the advent of the KEOGH Law, I do not remember a single older doctor in our area retiring from practice. It was simply not financially feasible before KEOGH. It has been liberalized several times since it was originally passed (also as a result of lobbying efforts). **This law alone is worth more to the self-employed physician than all of the dues he or she will pay in a lifetime.**
2. Incorporation: Private corporations for individual and group physicians were also made possible through the lobbying efforts of the AMA. Corporate benefits in the way of retirement plans and tax deductible insurance and other advantages are well known. How many practicing physicians among you have neither a KEOGH or a corporate retirement plan? I can assure you that there are many thousands of physicians who have no idea that it was the AMA which attained for them the privilege of sheltering money in this way.
3. Ethical Standards: These concern professional relations, terminal care decisions, and other decisions between doctors and patients, etc.

   If these standards are not set by doctors, they will be by some other body, probably government appointed, probably with a majority of lay people and government employees who have never participated in the management of sick patients. The bottom line could become the most important element of these decisions. Do you want such groups to set ethical standards for doctors? Of course not. You want **experienced physicians,** chosen by your elected representatives because of their respected position in the profession. You want the **Council on Ethical and Judicial Affairs of the AMA to set ethical standards.**
4. Medical Education: The AMA represents the profession in every aspect of education
   a. Undergraduate medical education (medical schools): The AMA with the AAMC make up the accreditation committee on medical education and survey and accredit all U.S. medical schools.
   b. Graduate medical education: The AMA is one of the parent organizations that make up the residency review committees that survey all residencies and approve or terminate them.
   c. The AMA is a similar participant as far as CME is concerned — you want organized medicine in these activities.
5. Legislative Activities
   This is the function of the Washington office and is surely one of the most important activities and services of the AMA.
   a. Our lobbyists are professionals and have developed key contacts in the administration and on the hill.
   b. They provide us with consistently sound advice on when to give ground on some minor issue to save a more important one, and when we can be firm on an entire issue.

c. I wish time permitted a review of some of the legislative battles, but it doesn't. The two in the fall of '83 and the spring of '84 when we defeated mandatory assignment were classics.

E. Expected legislative threats to quality medical care

1. One does not have to look very far to find potential government threats to the continued provision of high quality care to our patients. DRG's for physicians, unreasonable peer review demands, the medicare payment fee freeze, which has been extended a number of times, immediately come to mind. But I suggest to you that you ain't seen nothing yet. If Gramm-Rudman withstands the constitutional challenge and runs its full course as projected, we will experience cuts in important medical services the likes of which this country has never experienced before:

   a. Medicare
   b. Veteran's Medical Care,
   c. Indian Health Service,
   d. Community and Migrant Health Services,
   e. The National Institute of Health,
   f. The CDC, and
   g. The alcohol-drug abuse and mental health program,

   will not be slashed with a knife, but with a meat axe. It won't be fat that is paried away, it will be muscle and bone, and this will occur not once, but annually progressively over the next several years.

   I do not know whether organized medicine can control or reduce these planned reductions and this serious challenge to the provision of quality care or any care at all to some needy people. But I am convinced that 44 percent of the doctors cannot do it. We need the full complement. The only way to approach that is with unified membership.

IV. UNIFIED MEMBERSHIP

A. Organizing the campaign

1. To have a realistic chance at success in this undertaking, one must have an overall organized plan. It won't work out if you simply put in a resolution or council recommendation and plan to debate it and vote it up or down at the annual meeting. There must be a lot of spade work done so that every member who comes to the meeting knows that the number one issue of your meeting will be the questions of unified membership with the AMA.

2. There obviously are ways to organize this campaign, but I can tell you how we did it in Virginia. It is good tactics to broaden your exposure and hopefully your support a step at a time.

3. One of the regular issues of the Virginia Medical Monthly had unification as its chief topic and had articles from five or six members discussing both the positive and negative side of the question.

4. Every area of the state must receive the membership speech at either the local society meeting or the largest hospital staff meeting in the area. We have a council of about 30 members and each of these addressed one or two local societies at major hospital staff meetings over a period of about 90 days. We blanketed the state and the issue was thoroughly debated on the local level. I have prepared a standard membership speech with slides which was used by most of the speakers. This, of course, would be available to you.

5. So I say to you that we can have more members and we can have more unified states, if the people in this room will make a firm commitment to proceed along these lines; and you can be assured that you will get all the support you can use from our Chicago office.

B. Objections to unification which will be raised

   In the early stages, some may even charge that unified membership is illegal.

1. The reality is that the five unified states (Illinois, Oklahoma, Mississippi, Virginia, and Delaware) disprove this.

2. Even further proof is the fact that the **American Dental Association** is unified in all 50 states. It has been tested all the way to the supreme court and judged to be perfectly legal.

   Incidently, have any of you heard of DRG's for dentists?

3. Unified membership will be opposed not only by some who are inactive in medicine, but by others who are quite active and indeed leaders in the society. It will be mislabeled as forced membership, union shop, closed shop, compulsory membership, and so forth. In truth, it is none of these things. If it were, I would oppose it just as I have always opposed these concepts in other arenas (Virginia is one of the states with a right to work law.)

4. Unified membership does not force any doctor to join any organization against his or her will. A doctor can be licensed, get hospital privileges, join specialty societies, and practice a lifetime and never join any organization in the medical field.

5. Unified membership is simply a better and more powerful organization to serve the needs, not only of physicians, but also the public — our patients. It says to the doctor, "we want you in organized medicine. We need you and you need the organization. We need each other more than ever before. But no longer can you come one-third of the way in, or two-thirds of the way in, and use these levels as a platform to disparage the efforts and the activities of the others." And this certainly happens.

   Now if you are to participate and you surely should, you must get all the way in, and belong to all three levels.

C. Why should we change from the old system now? What is so different about these times?
Answer: Because medicine has more problems than ever before and our profession is threatened as never before.

D. The government, our hospitals, the Blue Cross Blue Shield and other third party payors, entrepreneurs, and others want to change us from our free enterprise status, wherein we can practice and take care of patients as we are trained to do, to an employee status where we will be controlled by their dictates, and they are having considerable success.

E. Another objection which will be raised is the claim that unified membership will cost the state society members. This has been advanced as a concern in other states which have attempted to unify and failed. It can and must be adequately addressed and rebutted.

1. The new states unified in '85 are too recent to test, but two states (Illinois and Oklahoma) have been unified for years. Illinois State Medical Society has as members 65 percent of the licensed physicians in the state, and this is above the national average. Oklahoma has almost 80 percent of licensed physicians as society members and this is near the top.

F. Doctors simply can't afford it. The answer to that one is that they simply cannot afford not to belong to the AMA. Were it not for the AMA, all doctors in the United States would have been mandated since the fall of 1983 to accept all medicare assignments, there would be no KEOGH Law, or right to incorporate and set up corporate pension plans.

Many other onerous federal bills would have been enacted and none would have been vigorously challenged in the courts.

Weakening of the AMA by loss of membership and dues revenue will cost physicians far more in actual dollars than any dues that they will ever pay. The AMA is the only organization that can represent their views in Washington with maximum efficiency, and the best chance of a successful outcome.

G. One of the most difficult proposals to counter is the insistence of some members that the issue be submitted to written ballot of the entire membership.

1. This should be avoided at all costs, as should written or proxy votes taken by local societies for the same reason. It is

almost impossible to get a two-thirds positive vote from chronically absent members for a by-law change. You simply cannot educate enough of your membership on all of the facets of this complex problem. Too many simply do not come to the meetings.

  a. First, they don't know about the intangible benefits of membership which they are receiving and not paying for.
  b. Second, they believe the incorrect charge that it is forced membership.
  c. Third, they are not alert to the intention of the federal government regarding changes in the payment systems for medicare patients and the dismantling of the entire medical social program.

F. No, the right place to act on this issue is in your House of Delegates — the elected representative leadership of your state society. They listen to and participate in the debate and become informed. This is where the decision has been made in the other unified state societies, and your society can be just as strong in its leadership.

V. THERE ARE SEVERAL WELL KNOWN quotations which could be applied to this problem including Abraham Lincoln's statement that a house divided against itself cannot stand, or Benjamin Franklin's statement that we must hang together else we shall all hang separately. But the one I like best is from the old homespun philosopher, Elbert Hubbard. This particular quotation is his hung on the wall of the resident's office at Henry Ford Hospital when I was a resident. It was a pertinent in those days because we had the old vicious pyramid system in the surgical residency. We started out with 16 first year residents and ended up with only one survivor in the fifth year. The others were progressively lost in the intervening years.

So when reappointment time came along, we used to say, "The winds are blowing." This referred to Mr. Hubbard's statement in his treatise entitled, "Loyalty". It went like this:

"If you work for a man, for heaven's sake work for him. If he pays wages that supply you your bread and butter, work for him. Speak well of him, think well of him, stand by him, and stand by the institution that he represents.

"Don't work for him part of the time and the rest of the time work against him. Give an undivided service to him.

"An ounce of loyalty is worth a pound of cleverness.

"If you can't follow this course, resign your position and then you can damn to your heart's content.

"If you don't follow this course, the first high wind that comes along will blow you away and you will never know why."

Ladies and gentlemen, think it over. Where will you be when the high winds come? They are surely on the way in the form of the Gramm-Rudman Law and other onerous legislation yet unwritten.

Let's get on with it and unify.

Clinical Use of Lithium in Manic-Depressive Illness

JASBIR SINGH KANG, M.D.*
CHUNG-CHOU CHU, M.D.*
STEPHEN L. RUEDRICH, M.D.
JAMES E. WILSON, PHARM.D.
STEPHEN E. WILLIAMS, PHARM.D.
Department of Psychiatry
University of Nebraska Medical Center

MANIC-DEPRESSIVE illness, also known as bipolar disorder, is part of the affective disorder spectrum, and it occurs in approximately 1% of the general population.[1] Typical manic-depressive illness is characterized by episodic periods of mania and/or depression which generally last for several weeks to several months with periods of normal mood and functioning between episodes. Because the depressive portion of manic-depressive illness closely resembles unipolar major depression, which affects 10-20% of the adult population,[2] many of these patients initially seek treatment from their primary care physicians for relief of their symptoms. Thus, it is essential for these physicians to become skilled in detecting manic-depressive illness, be familiar and comfortable with pharmacologic and psychosocial treatment options and approaches to such patients, and able to facilitate appropriate referral when indicated.[3]

This paper will address the clinical presentation of manic-depressive illness and provide general guidelines for treatment with a focus on one important aspect of treatment, the use of lithium.

Manic-Depressive Illness

The hallmark of manic-depressive illness is episodic mood swings. Full blown manic and depressive episodes comprise the extremes of mood alteration with intervening euthymic (normal mood) states. The features of acute mania include: elevated or irritable moods, pressured speech, grandiosity, insomnia, flight of ideas, distractability, and hyperactivity without apparent fatigue. Progression of mania may be accompanied by increased irritability, fragmented speech and occasional hallucinations and delusions.[4] Within manic-depressive illness, the occurrence of depressive episodes is more common than manic periods. Depressive episodes are characterized by dysphoria (sadness, despair, feeling "blue"), hopelessness, worthlessness (low self-esteem), changes in sleep (hypersomnia or insomnia) and activity (retardation or agitation), decreased ability to concentrate, loss of interest in usually pleasurable activities, appetite and weight disturbances (increase or decrease) and suicidal ideation or attempt.[4] Males and females appear equally susceptible with onset of the first episode at any age following early childhood. The initial or subsequent episodes may appear reactive to some precipitating psychosocial stressor, but can also begin insidiously without an apparent event. The illness appears familial; persons with manic-depressive illness demonstrate increased incidence of primary affective disorders in first degree relatives. A manic episode is necessary for the diagnosis of manic-depressive illness; multiple depressive episodes are more likely representative of major depressive illness.[2, 4] A complete list of diagnostic criteria for a manic and a depressive episode is provided in table 1.

Differential diagnosis

A number of other psychiatric and medical conditions can mimic manic-depressive illness, and numerous medications can also produce or mimic mania, depression, or both. A detailed history of previous psychiatric and physical disorders, current psychosocial stressors and recent medications is necessary prior to making the correct diagnosis. Differential

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*Address correspondence and reprint requests to: Jasbir Singh Kang, M.D., Department of Psychiatry, University of Nebraska Medical Center, 42nd & Dewey Avenue, Omaha, Nebraska 68106.

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Table 1: DSM III Diagnostic Criteria for Manic-Depressive Illness[4]

Manic Episode	Depressive Episode
A. One or more distinct periods with a predominantly elevated, expansive, or irritable mood.	A. One or more periods of dysphoric mood or loss of interest or pleasure in usual activities.
B. Duration of at least one week, during which, at least three of the following symptoms have persisted to a significant degree:	B. Duration of at least two weeks, during which, at least four of the following symptoms have been present nearly every day:
1. increased activity or restlessness in social, occupational or sexual spheres.	1. loss of interest or pleasure in usual activities, or decrease in sexual drive.
2. more talkative than usual or pressured speech.	2. psychomotor retardation or agitation.
3. decreased need for sleep.	3. insomnia or hypersomnia.
4. inflated self-esteem (grandiosity).	4. feelings of worthlessness, or excessive guilt.
5. increased distractibility.	5. difficulty with concentration.
6. increased activities, e.g., buying sprees, sexual indiscretions, foolish business investments.	6. loss of energy, fatigue.
7. flight of ideas or racing thoughts.	7. recurrent thoughts of death, suicidal ideation, or suicide attempt.
	8. poor appetite or significant weight loss or increased appetite or significant weight gain.

C. Neither of the following dominate clinical picture when criteria A & B above are not present:
  1. preoccupation with a mood-incongruent delusion or hallucination.
  2. bizarre behavior.

D. Not superimposed on schizophrenia, schizophreniform disorder, or a paranoid disorder.

E. Not due to any organic mental disorder.

diagnosis will be considered here separately for manic and depressive components.

Mania: Cyclothymia, a less severe but chronic form of manic-depressive illness is, perhaps, the commonest offender. Cyclothymic disorder may be distinguished by its milder symptomatology and more chronic course. Paranoid schizophrenia and schizoaffective disorder can both present with manic-like symptoms, but greater evidence of psychosis and absence of the cyclic pattern of mania and depression differentiates them from manic-depressive illness. Many physical disorders may produce manic-like symptomatology.[4, 5] These include: (a) medications like calcium, tolmetin, metoclopramide, procyclidine, high doses of certain decongestants, bronchodilators, steroids, toxicity of antidepressants, procarbazine, L-dopa, bromides, amphetamines, PCP (phencyclidine) and cannabis; (b) metabolic disturbances such as dialysis, post-operative delirium states, vitamin B_{12} deficiency and endocrine hyperfunction (thyroid and adrenal); (c) infections like neurosyphilis, influenza, post-St. Louis Type A encephalitis and other febrile disorders; (d) seizure disorders, especially temporal lobe epilepsy; and (e) CNS diseases such as tumors, multiple sclerosis and organic affective syndrome.[6, 7]

Depression: The differential diagnosis for depressive symptomatology is extensive; cyclothymic states, schizoaffective disorder, dementia (senile or multi-infarct type), dysthymic disorder, and grief may all have depressive symptoms. A careful history of the onset and progression of symptoms and absence of prior manic episodes may help differentiation. Again, many physical disorders mimic or produce depression, including: (a) endocrine disorders — Cushing's disease, Addison's disease, myxedema, and diabetes; (b) infections — hepatitis, influenza, viral pneumonia, and infectious mononucleosis; (c) intracranial tumors; (d) other CNS diseases — Parkinson's disease, cerebral arteriosclerosis, multiple sclerosis, and systemic lupus erythematosis; and (e) pernicious anemia. Medications that may induce depression include the following: barbiturates, benzodiazepines, phenothiazines, haloperidol, withdrawal from amphetamines, phenylbutazone, indomethacin, antineoplastic agents, physostigmine, antibiotics (notably sulfonamides), anti-hypertensives (propranolol, reserpine, methyldopa, clonidine, hydralazine), L-dopa, phenacetin, carbamazepine, digitalis, procainamide, female hormones, corticosteroid, alcohol, lecithin, and choline.[8] A careful drug history and weighing of the relative contribution of each drug, and the temporal relationship between administration of the drug and onset of depressive symptoms is necessary for accurate diagnosis.

Treatment

Once a diagnosis of manic-depressive illness is established, the physician has several treatment options. In the past, numerous approaches have been outlined for individuals with manic-depressive illness. Lithium salts have been by far the best approach with at least a 70 percent response rate in controlled clinical trials.[2] Carbamazepine, an anti-convulsant used in temporal lobe epilepsy, has also shown some anti-manic effect, and there is growing evidence of its efficacy in lithium-resistant cases.[9] Electroconvulsive therapy (ECT), antipsychotic drugs, antianxiety agents and antidepressants are the other treatment options sometimes utilized in conjunction with lithium or by themselves.[2, 3, 5, 9-12] As with most other psychiatric disorders, individual and/or family supportive psychotherapy must be the cornerstone of treatment upon which any pharmacological approach will depend. The remainder of this paper will focus on one primary aspect of the treatment of manic-depressive illness, the use of lithium salts.

Lithium Salts

Lithium was first utilized in medicine for treatment of gout in the mid-19th century.[2, 5] Subsequently, its popularity grew and many other therapeutic properties were ascribed to it such as stimulant, sedative, anti-diabetic and anti-infective activities. In the 1930's, it also became popular as a salt substitute for patients with cardiac disease but unfortunately led to serious and often fatal intoxications.[5] For this reason, lithium salts were removed from clinical use over the next decade. It was not until 1949 that lithium began its therapeutic comeback, when John Cade, an Australian physician, published a paper claiming specific anti-manic effects for the ion.[2, 3, 5, 12, 13] Lithium was approved for clinical use in 1970 in the United States for the treatment of manic-depressive illness.[2, 3, 5] To date, lithium is the best single pharmacologic treatment for acute mania, and is also the best single prophylactic agent for the prevention of cycles of mania and depression in manic-depressive illness.

Mechanism of Action

The mechanism of action of lithium remains largely unclear at this time. Some research supports correction of some ion exchange abnormality; other theories propose increases in neuronal release of CNS neurotransmitters such as norepinephrine, serotonin, and dopamine. Lithium has been shown to increase re-uptake and metabolism of norepinephrine, alter serotonin receptor sensitivity, and may decrease available CNS acetylcholine.[2, 12] One further hypothesis suggests that lithium modifies the adenylate cyclase systems which then affect membrane permeability through alteration in post-synaptic receptor sites.[2] To date there is no consensus on its mechanism of action.

Preparations and pharmacokinetics

Lithium is administered as tablets, capsules (carbonate), slow release capsules, or as a solution (citrate). Gastrointestinal absorption varies from 85% for tablets, 95% for capsules, and to 100% for solutions. Serum levels peak approximately three hours after oral ingestion.[2] Lithium circulates in body fluids as a small ion, hence it is not metabolized, but excreted almost entirely unchanged in the urine with negligible quantities appearing in sweat and feces. Kidney filtration produces 80% re-absorption in the proximal tubule with smaller amounts re-absorbed in the Loop of Henle.[2] At steady state, the amount filtered and amount re-absorbed maintain a constant ratio. Lithium is unevenly distributed in the body with high concentrations in the kidneys, but relatively low concentrations in brain tissue. Serum to CSF ratio is 3:1 or 4:1 during chronic use. Lithium is actively transported across some cell membranes; following a stable dosage schedule, a steady state is reached in plasma in three to five days. Fifty percent of a single dose of lithium may be excreted in as short as six to 10 hours; however, in patients on maintenance therapy, the half-life of lithium is approximately 18 hours.[2, 12] The half-life may vary widely depending upon the age of the patient, renal function, and fluid and electrolyte balance.

Clinical Use of Lithium

When a decision is made to initiate lithium therapy, a thorough evaluation is necessary to rule out medical conditions that may contraindicate or may worsen with its use. Patients should have a thorough physical examination, and a laboratory screen consisting of complete blood count, thyroid function tests, renal function tests (blood urea nitrogen and serum creatinine), serum electrolytes and an electrocardiogram.[2, 12, 14] Patients and family members should be informed regarding the risks and benefits of both lithium treatment and alternate therapies for manic-depressive illness.[3] At this time, the need for regular follow-up and periodic blood levels should be stressed.

Acute treatment

Mania constitutes a psychiatric and sometimes a medical emergency. Manic individuals often pose additional treatment problems in that they may not see the need for treatment of their condition. Patients with acute mania may feel unusually well, energetic and have an elevated sense of themselves and their abilities. Such grandiosity and lack of judgement may prevent insight regarding the need for treatment, and can be extremely stressful to family members or other concerned persons.[10] Compliance with outpatient management is often poor. Therefore, hospitalization is highly recommended and often unavoidable in order to prevent potential harm to either the patient or others in the environment. Once hospitalized, if no contraindications exist, lithium treatment is initiated. The physician then has two therapeutic options. For mild to moderate manic symptomatology, an initial dose of 300 mg of lithium carbonate three times a day is recommended.[3] In more severe cases, 300 mg four times per day may be used. After three to five days of treatment with the beginning dose, a lithium level is drawn, optimally, 10 to 12 hours after the last dose of lithium.[12, 14] Daily dosage is then adjusted aiming for therapeutic levels of 0.8 to 1.5 $mEq/_L$.[2,11,12,14,16] Lithium levels should be drawn weekly until a steady therapeutic level is established.[12] Lithium is effective in controlling acute manic symptoms in at least 70% of patients.[2, 17] However, it does not exert its therapeutic effect quickly and generally five to seven days is required for lithium to be effective. For this reason, neuroleptics or antianxiety agents are often necessary and valuable early in treatment to control mania. Neuroleptics can then be gradually tapered and discontinued as lithium takes effect.

Alternatively, Cooper and associates have developed a nomogram to predict lithium dosage requirement for achieving a therapeutic level.[18] In this method, a patient is administered a single dose of 600 mg of lithium and blood levels are measured 24 hours later. The therapeutic dosage requirement is then predicted from the nomogram (see table 2).

Table 2:
Prediction of Lithium Dosage Requirement[18]

24-Hour Serum Level After Single 600 mg Loading Dose (m $Eq/_L$)	Predicted Dosage Required
Less than 0.05	1200 mg T.I.D.
0.05 - 0.09	900 mg T.I.D.
0.10 - 0.14	600 mg T.I.D.
0.15 - 0.19	300 mg Q.I.D.
0.20 - 0.23	300 mg T.I.D.
0.24 - 0.30	300 mg B.I.D.
More than 0.30	300 mg B.I.D.*

* Use extreme caution

Acutely depressed manic-depressive patients may require treatment with lithium also, sometimes in combination with anti-depressants which, like neuroleptics, should be tapered or discontinued with resolution of the depressive symptoms. This will prevent escalation from depression into mania which can occur in manic-depressive patients given anti-depressants. For elderly manic-depressive patients, lithium dosage should be reduced because of compromised body physiology in older age groups. Patients with severe and/or complex symptoms should be cared for in consultation with a psychiatrist.

Maintenance treatment

Not only are lithium salts valuable in the treatment of acute manic episodes, but they also provide protection against recurrence of symptoms, and hence are prophylactic agents as well.[3,12,15] Patient selection for long-term therapy is crucial. The potential for recurrence of symptoms, the severity of disability, and psychosocial and clinical aspects of each case are taken into consideration to ensure that it would be in a patient's best interest to receive continuous prophylactic treatment. Davis, in his review of eight controlled studies of manic-depressive patients, reported a 36% relapse rate for patients on lithium versus 79% for patients on placebo.[12] When considering lithium prophylaxis, several criteria are used for selection: (1) two or more manic episodes within two years, (2) age of onset over 30 years.[15] However, there are no definite guidelines available to determine length of prophylaxis. Physicians must exercise clinical judgment regarding whether to stop or continue long-term treatment.

Monitoring of lithium therapy in prophylaxis is extremely important; the potential for toxic reactions at serum levels above 1.5 $mEq/_L$ is high.[16, 19] Maintenance patients should have blood levels drawn twice per month initially. Once a lithium level is stabilized, frequency can be decreased to a level of every two to three months. Again, lithium levels should be drawn 10 to 12 hours after the last dose, usually before the patient takes their morning dose of lithium. In prophylactic treatment of manic-depressive illness, it is reasonable to maintain lithium levels in the 0.6 to 1.0 $mEq/_L$ range.[2, 14, 19] Greater care should be exercised in geriatric patients who are susceptible to higher plasma levels, and who may show satisfactory responses at lower levels. Periodic checks (every six months in long-term prophylaxis) of cardiac, thyroid and renal functions should be made in order to prevent cardiac arrhythmias, secondary hypothyroidism or renal damage.[20]

In manic-depressive women who become pregnant while on lithium, especially close monitoring of lithium level is indicated. If possible, lithium should be discontinued, especialy during the first trimester. If this is not possible (based on the severity of past or present symptomatology), lithium can be continued. The physician should realize that lithium clearance increases by 50-100% in women during the course of pregnancy, because of volume expansion; therefore, higher doses are necessary to maintain therapeutic levels. Lithium clearance then falls precipitously following delivery, and toxic symptoms may ensue if the dose is not reduced immediately by at least 50%. Blood levels should be closely monitored during this time. Mothers should also avoid breast feeding because lithium is secreted in breast milk at approximately 30-50% of serum levels.[15, 21] Finally, direct relationships exist between lithium excretion and sodium blood level, so that extreme care is necessary when manic-depressive patients go on low-salt diets or diuretics for other medical conditions.[2, 16] In hot weather, more frequent lithium level determinations are needed for dosage adjustment because of sodium losses from increased sweating, which can result in lithium toxicity.[5]

Side effects of lithium treatment

Lithium, like most drugs, is not free of side effects. Most of these effects are mild and transient. If the patient is well informed prior to therapy, they are generally well tolerated.[3, 16] Sometimes, however, side effects may become severe, reduce compliance, or prevent continuation of therapy.

Early in treatment some patients may experience symptoms of anxiety, thirst, nausea, occasional vomiting, diarrhea, anorexia, metallic taste, abdominal pain, muscle weakness, lethargy, decreased concentration, and sedation. These effects are generally transient, but they may persist in certain patients or at higher lithium levels.[2,3,5,21] Side effects that appear late in therapy are more troublesome. Frequency of occurrence of both early and late side effects increases with dosage and blood levels but are generally not seen at or below therapeutic levels.

Central nervous system (CNS) is probably the primary site of action for lithium. Likewise, this is one of the major areas where adverse effects can be seen. Tremors with an irregular rhythm and jerking amplitude are commonly seen with lithium therapy. These tremors, while present at rest, tend to intensify with intentional movement. Lithium induced tremors may improve or worsen depending on serum concentration.[2,5,19,21] Consequently, a slow release product may benefit the condition, or simply a dosage reduction may be in order. Such tremors also respond well to beta adrenergic blocking agents such as propranolol.[3] Other mental symptoms including slurred speech, confusion, memory impairment, and problems with concentration have occurred even with normal volunteers. Dizziness and tinnitus have also been reported. Certain EEG changes have been reported proportional to serum lithium levels.[19, 22] Tearing, itching, and burning of the eyes and blurring of vision and worsening of cataracts have also been reported to occur.

One of the most frequent complaints is the development of polyuria and secondary polydipsia. This nephrogenic diabetes insipidus syndrome is caused by lithium induced vasopressin un-responsiveness and not a dysfunction of the posterior pituitary gland. This problem is usually benign and self limiting; lithium dosage adjustments and occasionally diuretics (e.g. Chlorothiazide) are needed.[2,5,12,16,21] Occasionally urinary incontinence, glycosuria and albuminuria may develop. Chronic use of lithium may cause histologic changes in the kidney leading to decreased urine concentrating ability and creatinine clearance.[16] Laboratory follow-up throughout lithium treatment is advised.

Regarding the cardiovascular system lithium can induce cardiac arrhythmia and other conduction defects such as sinoatrial block. EKG changes with lithium are generally conduction disturbances and ST-T wave changes.[16,21,23] Hypotension, peripheral cirulatory collapse, myocarditis, and fluid retention are other reported side effects.

Several endocrine problems have been attributed to lithium, including hypothyroidism, goiter, weight gain, changes in glucose tolerance and insulin sensitivity.[21, 24] Lithium has also been reported to result in congenital cardiac malformations in infants of treated mothers, especially when it is used in the first trimester of pregnancy. Therefore, it should be avoided to the extent possible in the first trimester of pregnancy.[5, 21] Lithium has been reported to result in acneiform lesions, alopecia, chronic folliculitis, pruritic maculo-papular rash, exacerbation of psoriasis, and anesthesia of skin and xerosis cutis.[19, 21]

Lithium toxicity

Toxicity to lithium salts manifests itself at serum levels of 2.0 $mEq/_L$ and above, and is usually secondary to acute overdose or chronic administration of inappropriately high doses.[2, 16] Additionally, some patients may become toxic secondary to compromised renal function and decreased excretion of lithium. Lithium toxicity can also occur at levels below 2.0 $mEq/_L$; therefore clinical judgment rather than serum level alone should determine the management.[25] Initially, many patients first develop gastrointestinal symptoms such as nausea, vomiting, and diarrhea, which alter fluid status and may worsen toxicity. This is followed by CNS depression, somnolence, dysarthria, lethargy, blurred vision, vertigo, confusion, choreoathetoid movements, ataxia, increased muscle tone and increased deep tendon reflexes. More severe toxic symptoms occur at levels of 3.0 $mEq/_L$ or higher. These include decreased blood pressure, arrhythmia, or conduction defects leading to cardiovascular collapse. Patients may also subsequently develop extra-pyramidal signs, major motor seizures, urinary and fecal incontinence, impaired consciousness and ultimately coma. Hypopyrexia and total vascular collapse can ensue. Early treatment of toxicity is extremely important because progression is generally the rule. Lithium should be withheld for at least 48 hours and if restarted, it should be done cautiously at a lower dose. Other supportive measures for toxicity are undertaken in order to monitor cardiac function, correct electrolyte imbalance, provide adequate hydration and promotion of lithium excretion. Severe cases of lithium toxicity may require peritoneal dialysis or hemodialysis.[2,3,16,19,21]

Drug interactions

Often lithium is necessary for patients who are undergoing treatment for concomitant physical disorders. Clinicians should be aware of possible drug interactions that may result. Some agents increase lithium levels, often to toxic levels, while others enhance clearance and lowering of lithium levels. Drugs that interact adversely with lithium are outlined in table 3.

Conclusions

Primary care physicians have a challenging task not only in detecting manic-depressive illness (especially in depressed patients) but also in providing appropriate therapy for such patients.[3] At this time, lithium is the best single pharmacologic agent for the acute and maintenance treatment of manic-depressive patients. Individuals receiving lithium therapy need more than monthly prescriptions of medication. Careful patient selection for lithium treatment as well as an ongoing therapeutic alliance, coupled with patient education regarding the risks and benefits of treatment, combine to enhance compliance. One must remember that the clinical symptomatology is more important than the blood level, and that treatment decisions must be based on the total

Table 3: Drug Interactions with Lithium[2, 3, 12, 17-19]

Drug Interacting with Lithium		Clinical Effect of Interaction
Antibiotics	Tetracycline Spectinomycin	increase lithium levels
Anti-inflammatory agents	Indomethacin Ibuprofen Naproxen	increase lithium levels
Xanthine derivatives	Theophylline Aminophylline	decrease lithium levels
Diuretics	Thiazide Spironolactone Triamterene Amiloride	increase lithium levels
	Osmotic (e.g., mannitol, urea)	decrease lithium levels
Antipsychotics	Chlorpromazine	decrease chlorpromazine levels
	Haloperidol	neurotoxicity (controversial)
Neuromuscular blocking agents	Succinylcholine Pancuronium	increase neuromuscular blocking effects
Anti-hypertensives	Methyldopa	increased risk of lithium toxicity

clinical picture.[3, 25] The use of lithium alone, or in combination with other drugs, should be tailored to fit the needs of each patient.

Lithium should be administered in divided doses from twice to four times per day depending on the preparation. Regular follow-up evaluations, with periodic serum lithium level determinations, aid in early recognition of problems and allow appropriate intervention. When manic-depressive illness is severe, persistent, unresponsive to treatment, or if a patient is acutely manic or suicidal, hospitalization and referral to a psychiatrist is advised.

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Magnetic Resonance Imaging of the Posterior Fossa: A New Modality

FRANCIS J. HAHN, M.D.*
EUGENE ONG, M.D.
CHARLES A. DOBRY, M.D.
THOMAS J. IMRAY, M.D.
Department of Radiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105

CLINICAL computed tomography (CT) of the brain, introduced by Godfrey Hounsfield in 1973, was a major revolution in evaluation of brain disease. Lesions which could only be visualized, if at all, with technically demanding and uncomfortable studies such as pneumoencephalography and cerebral arteriography could now be seen with great clarity and ease. Subsequent equipment advances as well as improved skill in CT interpretation rapidly increased anatomic resolution and lesion identification and characterization. Pneumencephalography is now a historical footnote and requirements for cerebral arteriography are significantly reduced.

Some problems in CT brain imaging persist in spite of this progress. Sagittal imaging, obtained only by reformating the axial imaging data, is not completely satisfying because of reduced spacial resolution. Some areas, most notably the base of the brain, brain stem and posterior fossa, are not clearly imaged because of artifacts produced by adjacent dense osseous structures.[1-4]

Magnetic resonance imaging (MRI) of the brain has resolved many of the problems associated with CT imaging. High resolution images may be obtained in any plane and the images are unaffected by adjacent osseous structures.[1-4] These features of MRI are especially useful in the study of the posterior fossa. It is the purpose of this article to demonstrate the utility of MRI in posterior fossa imaging. All MRI examinations were performed with a high field strength 1.5 Tesla system.

Case 1:

A 74 year old female presented with a dull occipital headache of one month's duration. The pain was exacerbated by bright light and recumbency. The patient became dizzy and unsteady when erect. Auditory acuity was diminished; however, coordination remained normal. There was a history of a left cerebral infarction in 1983 which resulted in a left temporal visual field deficit. The cranial nerves were otherwise normal. There was a positive Babinski sign on the left. The Romberg test was strongly positive with a tendency to fall backward. Her stance was steady but she had an unsteady gait. Tests of dysynergia including finger-to-nose, heel-to-heel and sensory function tests were normal.

A mass anterior to the medulla was identified on a CT examination performed at another hospital. MRI of the head demonstrated a 2.6 x 2 cm vertebral artery aneurysm superior to the foramen magnum and anterior to the medulla with superior displacement of the pons (Figure 1).

Case 2:

A 32 year old female presented with four months of progressive left hemiplegia involving the face, trunk and extremities. She developed headache, vomiting, diplopia, decreased hearing and difficulty speaking one month prior to admission. Extraocular motions were intact with gaze nystagmus in all directions. The cranial nerves were otherwise normal. The left upper and lower extremities had decreased strength and absent deep tendon reflexes. Vibratory sensation and proprioception were decreased in the left upper and lower extrem-

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*Reprint requests to: Francis J. Hahn, M.D., Associate Professor, Department of Radiology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105, (402) 559-4477.

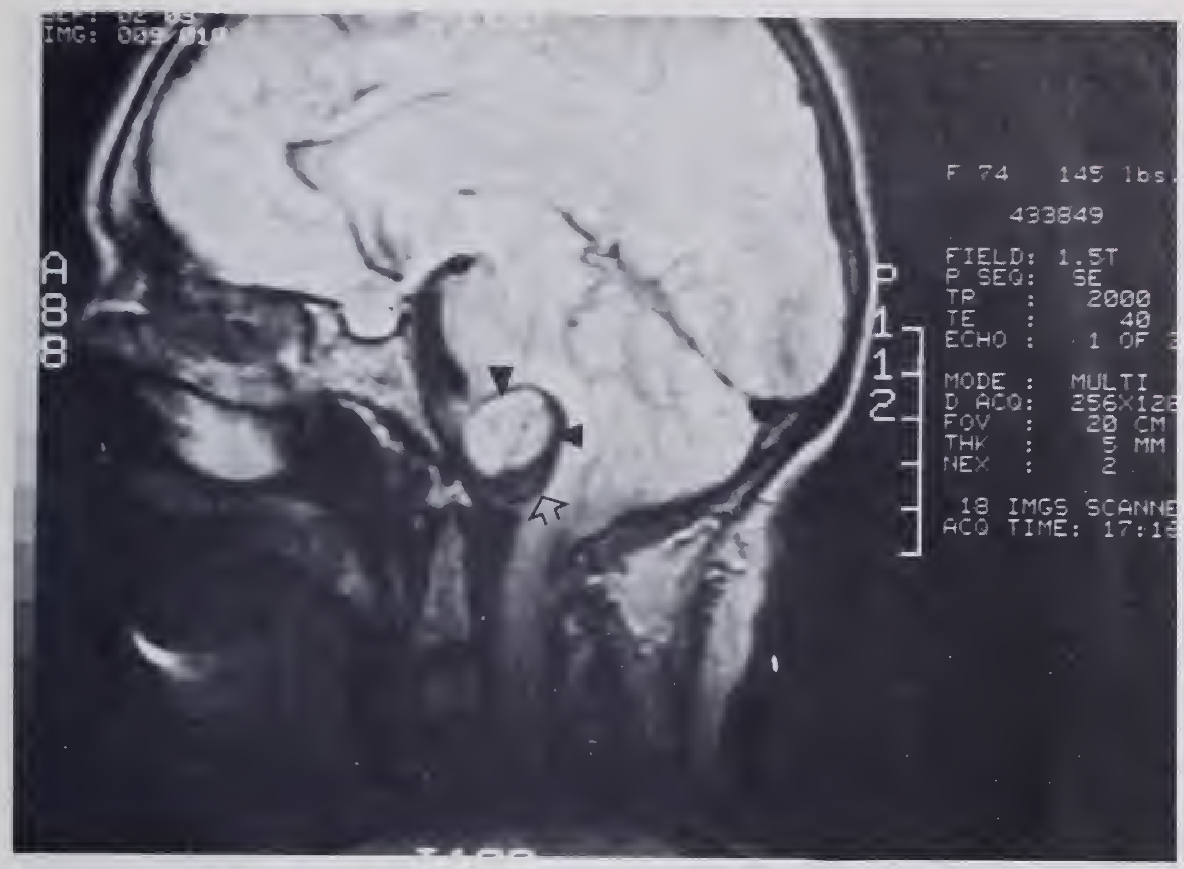

Figure 1
Giant vertebral artery aneurysm with low signal intensity rim (arrow) and high signal intensity lumen (arrowheads).

ities. The finger-to-nose test was uncoordinated on the left with a coarse intention tremor. She had a wide based stance, ataxic gait and a tendency to fall to the left. A CT brain scan at another hospital demonstrated a vascular brain stem lesion surrounded by edema. MRI demonstrated a low signal intensity lesion enlarging the brain stem with posterior displacement of the fourth ventricle (Figure 2). A pontine biopsy revealed the lesion to be a glioblastoma multiforme.

Case 3:

A 40 year old male with a bilateral occipital headache of three weeks duration developed right upper extremity weakness and numbness and subsequently had difficulty pronouncing words and a decreased sense of equilibrium. He had a positive Babinski sign on the right with unsustained bilateral clonus. He had normal strength in his right arm but decreased light touch sensation and diminished ability to perform rapidly alternating movements. MRI of the brain revealed a 2 centimeter brain stem hemorrhage surrounded by edema (Figure 3). Subsequent brain CT showed a 2 centimeter non-enhancing brain stem lesion. The basilar artery was displaced anteriorly but no aneurysm was identified at cerebral arteriography. The hemorrhage was secondary to a cryptic arteriovenous malformation in the brain stem.

Case 4:

A 53 year old man was treated with left pneumonectomy and post-operative radiation for squamous cell carcinoma of the left main stem bronchus. Eight months later the patient complained of a 20 pound weight loss, anorexia, and progressive weakness. He also experienced dizziness with change of position and had developed nausea, vomiting and dysphagia. Physical examination was normal except for a broad based gait. He had no dysdiadochokinesis. The initial brain CT was normal. Magnetic resonance imaging revealed a 1.5 centimeter metastatic lesion in the

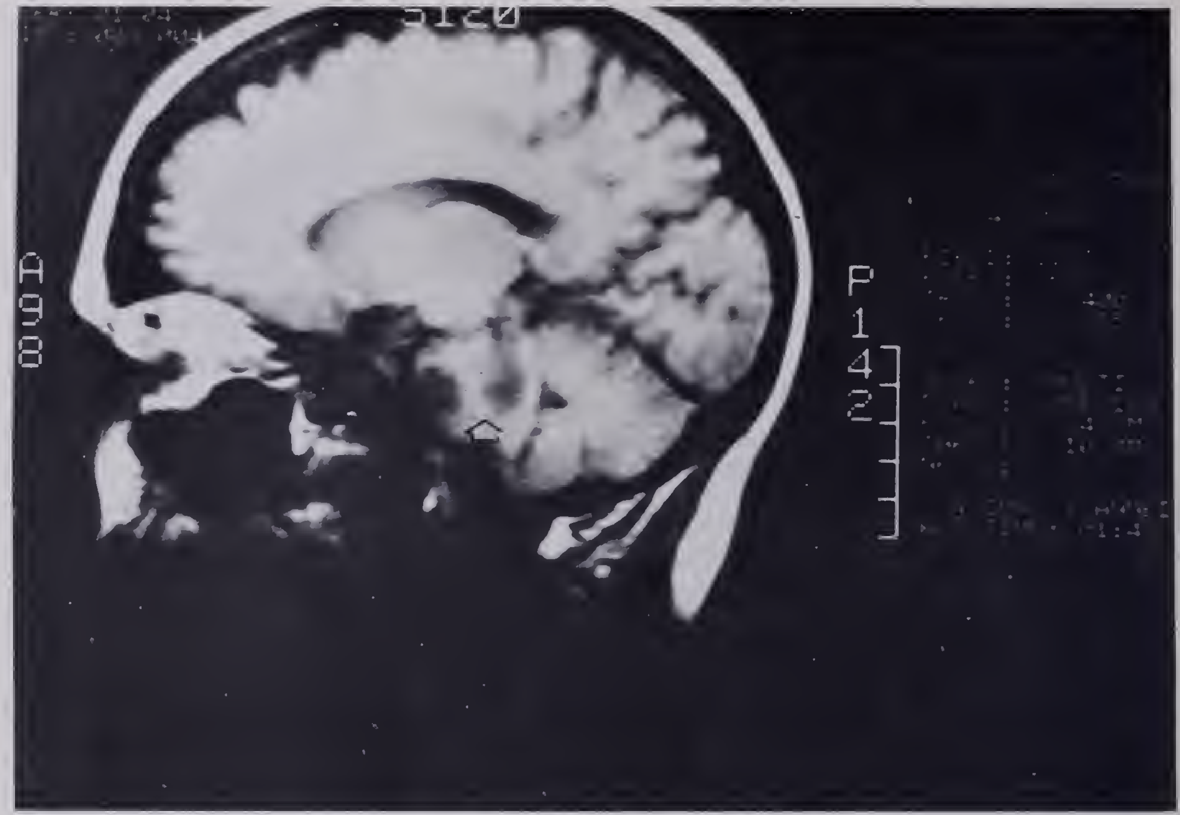

Figure 2: Pontine glioblastoma multiforme (arrow) with enlargement of the pons and compression of the fourth ventricle.

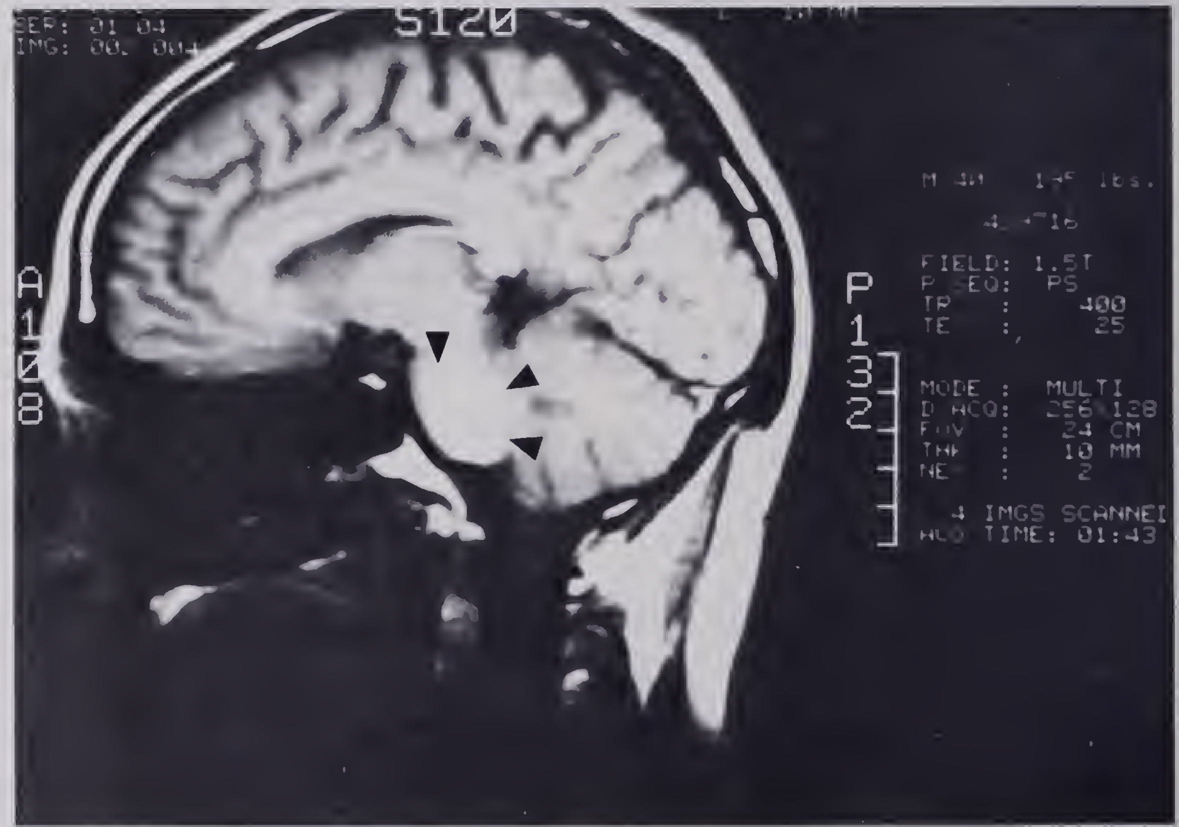

Figure 3: Brain stem hemorrhage - high signal intensity area (arrowheads).

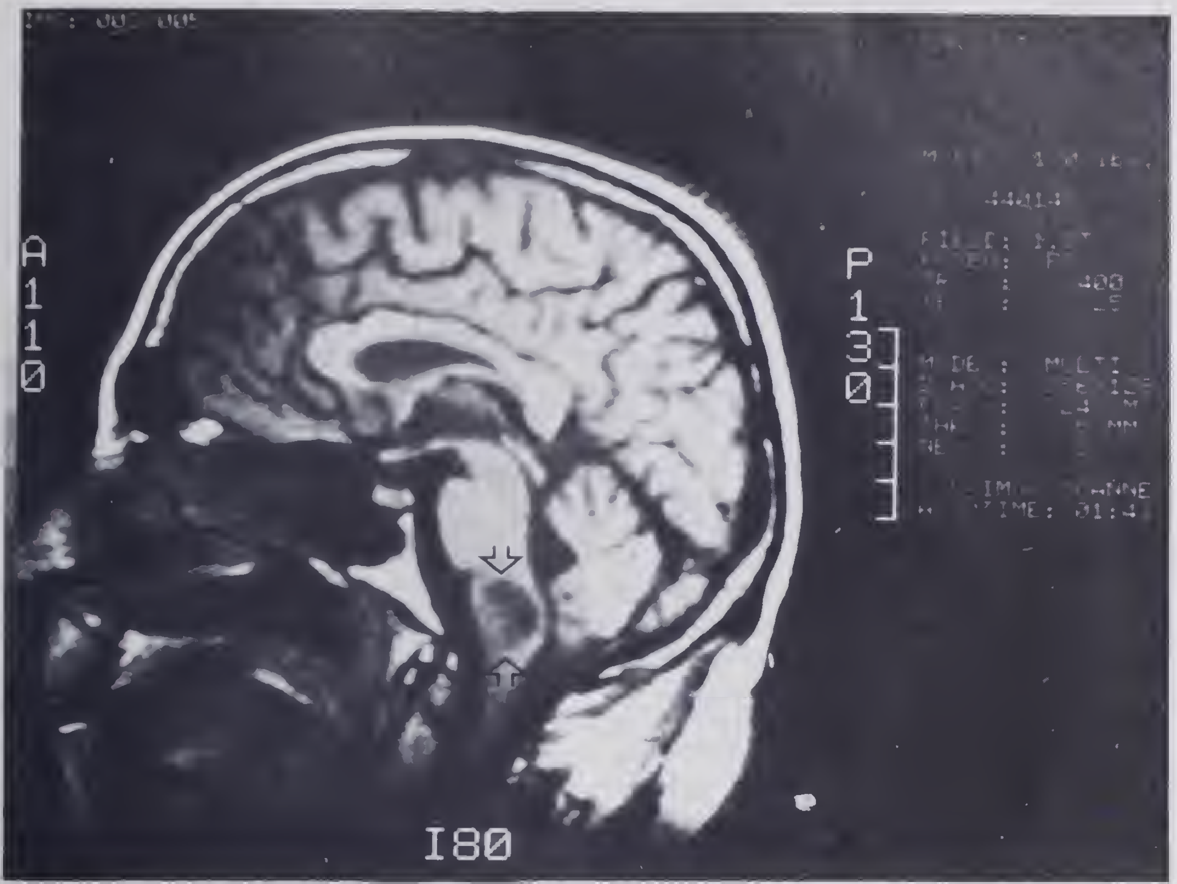

Figure 4
Low signal intensity brain stem metastasis (arrows).

medulla, 1 centimeter above the foramen magnum (Figure 4).

Discussion:

Magnetic resonance imaging is proving to be a very useful tool for the imaging of brain disease. This is particularly true for posterior fossa and brain stem lesions. A growing body of evidence indicates that MRI is more sensitive than CT for lesion detection in the posterior fossa and brain stem. Freedom from bone artifact and superior contrast detectability results in superior delineation of anatomic structures.[1-4] Displacement of normal structures assists in the differentiation of intra-axial from extra-axial lesions.[1] The direct sagittal and coronal views of a MRI study are often of more utility than axial CT views in this regard. MRI can further delineate lesions from underlying normal structures by demonstrating the change in tissue characteristics of lesions.[1-4] Additional experience with this technique may permit even more precise characterization of posterior fossa and brain stem lesions.

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Combination of Bacteriostatic and Bactericidal Antibiotics in the Treatment of Acute Salpingitis

GILLES R. G. MONIF, M.D., A.F.A.C.O.G., A.C.P.*
Department of Obstetrics and Gynecology, Creighton University School of Medicine, Omaha, Nebraska 68131

IN 1952, Jawetz and Gunnison introduced the concept of antibiotic antagonism by demonstrating that a bacteriostatic drug could impair effectiveness of a bactericidal drug by precluding the susceptible bacteria from entering into the logarithmic phase of growth.[1] Lepper and Dowling presumably demonstrated antagonism between penicillin and tetracycline in the treatment of pneumococcal meningitis.[2] Patients treated with penicillin alone experienced a mortality of 21% compared with 79% in those treated with penicillin and tetracycline. In dogs with experimental pneumococcal meningitis, chloramphenicol was antagonistic when given before penicillin but less so when given with or after penicillin.[3] In rabbits with experimental endocarditis caused by penicillin-sensitive streptococci, sterilization of the valve took longer when animals were given chloramphenicol one hour before penicillin than when penicillin was given first.[4] **In vitro** tests have shown antagonism when Klebsielleae are exposed to chloramphenicol before or after gentamicin.[5]

The Centers for Disease Control's therapeutic guidelines for acute salpingitis significantly changed in August 1982.[6] The basis for change eminated from the need to accommodate coverage for polymicrobial etiology, polymicrobial superinfection and the penicillinase-producing strains of **Neisseria gonorrhoeae,** when possible into a single therapeutic regimen.[6-11] If one were to select antibiotics based on drug-of-choice concept and still attempt to achieve some coverage for the non-penicillin resistant Bacteroidaceae and **Chlamydia trachomatis,** the resultant combination would include a bacteriostatic antibiotic (a tetracycline) and a bactericidal antibiotic (penicillin, one of its semi-synthetic analogues, or selected second or third generation cephalosporins). One of the several antimicrobial combinations now proposed by the Centers for Disease Control is the cefoxitin-doxycycline regimen, which combines a bactericidal antibiotic with a bacteriostatic antibiotic.[6]

This paper examines the therapeutic response of 22 patients to penicillin-doxycycline and compares them for evidence of drug antagonism to what has been established as the anticipated therapeutic result for monomicrobial salpingitis due to **Neisseria gonorrhoeae** treated with doxycycline alone.

Materials and Methods

The study population was prospectively drawn from women with acute gonococcal salpingitis hospitalized at the Shands Teaching Hospital, Gainesville, Florida. The patients had to have significant organ tenderness to deep palpation and evidence of peritoneal irritation to warrant hospitalization. Only those patients who were studied bacteriologically by culdocentesis were included in the study. The original study protocol stipulated that the administration of penicillin (5 million units IV over 4 hours) be followed at a one hour interval by 200 mg of doxycycline. Thereafter, the dosages of penicillin were 5 million units every six hours and doxycycline 100 mg twice daily. In the course of study, both drugs were administered concomitantly in seven instances.

The study initially began as an open, randomized study, which compared therapeutic response of patients with acute salpingitis to doxycycline versus penicillin and doxycycline. Because the residents tended to assign the sicker patients to the two drug therapy regimen, the comparative aspect of the study was abandoned. The results of patients treated with doxycycline alone have been previously reported.[7,8] The patient population studied represented a sequential sample of patients who had signed a valid informed consent and who met the study criteria. The number of patients reported represents those which had met the study criteria before the termination of the study with doxycycline alone.

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*Reprint Request To: Gilles R. G. Monif, M.D., Department of Obstetrics and Gynecology, Creighton University School of Medicine, 601 North 30th Street, Suite 4810, Omaha, Nebraska 68131.

Bacteriologic techniques: An endocervical culture was obtained with a sterile cotton applicator and plated directly on a Thayer-Martin agar plate (Pfizer Diagnostic, NY) at the Shands Teaching Hospital or a Lester-Martin agar plate (Transgrow, Scott Laboratories, Inc. Fiskeville, RI) at the University of Florida Hospital. Culdocentesis was performed under direct visualization with a #18 gauge needle and syringe through a surgical field which had been dried with cotton drumsticks and washed with Betadine solution (Purdue Frederick Co., Yonkers, NY). One to 4 ml of the four fluids obtained by culdocentesis were injected into two Anaport bottles. (Scott Laboratories, Inc., Fiskeville, RI) One of the Anaport bottles was then sent to the hospital microbiology laboratory, and the other was forwarded to the Anaerobe Laboratory of the Department of Obstetrics and Gynecology and Microbiology. The specimen received by the hospital laboratory was immediately subcultured for **N. gonorrhoeae,** whereas that forwarded to the Anaerobe Laboratory was plated 24 to 48 hours after collection.

Processing of the cul-de-sac specimens: The cul-de-sac specimens in the Anaport transport bottles were passed into an anaerobic chamber glove box (Coy Mfg. Co., Ann Arbor, MI). The specimen was retrieved with a needle and syringe and plated on various selective media. In addition, thioglycollate broth containing hemin (5 ug/ml) was inoculated. The plating media for anaerobic culture included: Columbia agar base (Baltimore Biological Labs, Cockeysville, MD) containing 5% sheep blood, cysteine hydrochloride (0.5 g/1), palladium chloride (0.33 g/1) and vitamin K-hemin solution (ABAP); ABAP supplemented with vancomycin hydrochloride (7.5 mg/1) and kanamycin sulfate (75 mg/1) and containing laked sheep blood; lecithin-lactose agar; Veillonella agar (Difco Labs, Detroit, MI); and Rogosa Selective Lactobacillus agar (Difco Labs, Detroit, MI). All media for anaerobic culture were placed in the reducing conditions of the glove box or an anaerobic jar containing a Gas-Pak generator envelope (Baltimore Biological Labs, Cockeysville, MD) for at least 24 hours prior to use. All inoculated anaerobic culture plates were placed in an anaerobic jar; these were incubated at 37 degrees centigrade.

An aliquot of specimen in the transport container was stained by the Gram method to directly determine the predominant morphologic types of organisms present.

Identification of strains: Aerobic isolates were identified by the standard classification scheme. Isolated colonies from anaerobic plates were subcultured for identification beginning 48 hours after inoculation. Colonies were picked and transferred to ABAP for purity, to peptone-yeast extract glucose (PYG) broth, and to BAP for aerotolerance testing. The anaerobic isolates were identified following the methods of the Virginia Polytechnic Institute Anaerobe Laboratory. Morphologic, cultural and biochemical properties were studied for identification. Carbohydrate fermentation reactions were read with the use of a pH meter. In addition, gas liquid chromatography was performed on extracted PYG broth cultures to detect fatty acid population. A gas chromatograph with a thermal conductivity detector was used to detect fatty acid end products of metabolism.

Subdivision of Study Population: Based upon the bacteriological data derived from culdocentesis specimen, of the patients treated with penicillin and doxycycline, ten had gonococcal endocervicitis and salpingitis without documentable bacterial peritonitis. Twelve other patients had at least one or more bacterial isolates recovered from the cul-de-sac.

Gonococcal Endocervicitis and Acute Salpingitis without Bacteriologically Documented Polymicrobial Peritonitis Treated with Penicillin and Doxycycline.

Demographic Characteristics: Ten women with endometritis/salpingitis due to **Neisseria gonorrhoeae** received penicillin and doxycycline. The mean age of the group was 20.1 years with a range from 18 to 28 years of age. The mean parity was less than unity. Only one patient utilized some form of contraception prior to her admission (birth control pills). One of the eight patients gave a history of prior salpingitis infection necessitating hospitalization. In two instances the intrauterine contraceptive device (IUD) was the mode of contraception. Two of the ten patients acknowledged a history of prior salpingitis necessitating hospitalization and therapy for asymptomatic gonorrhea respectively.

Therapeutic Response: The mean white blood cell count (WBC) and temperature prior to the initiation of therapy were 13,730 and 38.7 degrees centigrade, respectively (Table I). Forty-eight hours after the initiation of therapy, the mean blood count was 7,145. Eleven of the twelve patients had a temperature below 37.6 degrees centigrade within 36 hours. The mean duration of a temperature above 37.6 degrees centigrade was 13.6 hours. The remaining patient was afebrile 36 hours after initiation of therapy. Two patients exhibited maximum temperature after having been on therapy for at least six hours. All patients exhibited marked diminution of physical findings within 48 hours.

Gonococcal Endocervicitis and Acute Salpingitis with Bacteriologically Documented Peritonitis Treated with Penicillin or Ampicillin and Doxycycline:

Demographic Characteristics: Twelve women and culdocentisis-documented bacterial peritonitis received penicillin-doxycycline. The demographic characteristics of the group are summarized in Table II. The mean age of group was 20.3 years with a range of 15 to 30 years. The mean parity was less than one. Nine of the twelve women were practicing some form of contraception.

Therapeutic Response: The mean WBC and temperature prior to the initiation of therapy were 16,100 and 38.5 degrees centigrade, respectively (Table II). Three of the twelve patients failed to have a WBC of less than 10,000 at 48 hours (Table II). The mean duration of a temperature equal to or above 37.6 degrees centigrade was 8.5 hours. All of the patients who were initially febrile had a temperature below 37.6 degrees centigrade within 36 hours. The mean duration of a temperature above 37.6 degrees centigrade was 8.5 hours. Two of the patients continued to have significant physical findings 48 hours

TABLE I
THERAPEUTIC RESPONSE OF PATIENTS WITH MONOETIOLOGICAL GONOCOCCAL SALPINGITIS

Therapy (Number of Patients)	Mean Highest Temp. (Range)	Mean Initial WBC (Range)	Duration of Temp. 37.6C/hrs. (Range)	Mean WBC at 48 hrs. (Range)	Percentage of Patients Exhibiting marked Amelioration of Physical Findings at 48 hrs.
Penicillin & doxycycline (N=10)	38.7C (37.7-39.9C)	13,730 (9,800-17,900)	13.6 (4-30 hrs.)	7,140 (4,300-9,600)	100%

TABLE II
THERAPEUTIC RESPONSE OF PATIENTS WITH GONOCOCCAL SALPINGITIS AND ONE OR MORE NON-GONOCOCCAL CUL-DE-SAC ISOLATES

Therapy (Number of Patients)	Mean Highest Temp. (Range)	Mean Initial WBC (Range)	Duration of Temp. 37.6 C/hrs. (Range)	Mean WBC at 48 hrs (Range)	Percentage of Patients Exhibiting marked Amelioration of Physical Findings at 48 hours
Penicillin and Doxycycline (N = 12)	38.5 (37.9-40.0C)	16,100 (9,600-22,000)	8.5 (2-30 hrs)	8,300 (5.200-12,500)	86%

after the institution of combined therapy. The clinical course of the patient deemed a therapeutic failure is delineated in Table III. The bacterial isolates obtained from the cul-de-sac of these twelve patients are listed in Table IV. Three patients did not exhibit an accelerated lysis of their temperature (afebrile in less than 18 hours). In these three cases doxycycline was administered either before or at the same time as the penicillin.

Discussion

The purpose of this paper was to assess whether a bacteriostatic-cidal antibiotic combination could be used without altering the anticipated therapeutic response. Monif, et al. have proposed that three parameters, fever, white blood cell count and physical findings, provide quantitative titration points against which the adequacy of therapy can be judged.[9,10] They demonstrated that in patients with non-oetiological gonococcal salpingitis, there was an anticipated therapeutic response: 1) afebrile in 36 hours, 2) marked amelioration of physical findings in 48 hours, and 3) a normal WBC in 48 hours. In their series the presence of a polymicrobial cul-de-sac flora was demonstrated to be associated with an increased probability of an altered anticipated therapeutic response in individual cases. In their cases of polymicrobial peritonitis, investigators were not able to show a good correlation between the ensuing clinical response and **in vitro** resistance to doxycycline of one or more cul-de-sac isolates. The absence of a resistant organism correlated well with a good clinical response. Chow, et al. in their study on the bacteriology of salpingitis and clinical response to parenteral doxycycline, could not demonstrate a clear-cut correlation between clinical response and **in vitro** susceptibility of the cul-de-sac isolates.[11]

TABLE IV
THE SPECTRUM OF BACTERIAL ISOLATES DERIVED FROM THE CUL-DE-SAC OF PATIENTS WITH ACUTE SALPINGITIS TREATED WITH PENICILLIN AND DOXYCYCLINE

BACTERIAL ISOLATE	# OF PATIENTS
Neisseria gonorrhoeae	8
group B beta hemolytic streptococci	2
Bacteroides species	1
Bacteroides fragilis	1
ss *ovalis*	1
ss *thetaiotaomicron*	1
ss *fragilis*	2
Peptococcus prevotii	2
Lactobacillus fermentum	1
Clostridium histolyticum	1
Gram-positive nonsporforming rods	2
enterococci	1
nonhemolytic streptococci, not group D	1
alpha hemolytic streptococci, not group D	1
Gardnerella vaginalis	1
Peptostreptococcus spp.	3

Why can antibiotic antagonism be demonstrated **in vitro** and in animal model systems and not in patients with acute salpingitis associated with the presence of **Neisseria gonorrhoeae?** Dowling has shown that the interaction between antibiotics of differing mechanisms of action is partially a function of the concentration of antibiotics used and susceptibilities of the test organism.[12] For chloramphenicol to have an antagonistic action on the **in vitro** activity of penicillin, the concentration of penicillin must be low. The

TABLE III
CLINICAL PROFILE OF THERAPEUTIC FAILURE TO DOXYCYCLINE AND PENICILLIN

AGE	Parity	Prior Salpingitis	Proximity of onset to LMP	Highest Initial Temp.	Initial WBC/ESR	WBC at 48 hrs	Endocervix	Cul-de-sac (sensitivity to doxycycline)	Outcome
30	4-0-0-4	multiple documented episodes	1 day	38.8C	15,000/28	20,000	*N. gonorrhoeae*	*Gardnerella vaginalis* GPNS rods-1 ug/ml *Bacteroides* sp.-1 ug/ml *Bacteroides fragilis*-16 ug/ml	Secondary febrile spike highest to 39.3C. The development of a 4.5 cm dumbbell shaped cul-de-sac mass

model systems which demonstrate antagonism between bacteriostatic and bactericidal antibiotics are situations in which access by penicillin to the critical sites of bacterial replication are limited, i.e. meningitis and endocarditis.[5] The documented ability of both penicillin and doxycycline to attain therapeutic levels in the tissues of the female genital tract probably precludes the achievement of an antagonistic ratio between these bactericidal and bacteriostatic antibiotics.

Antimicrobial antagonism is a real phenomenon **in vitro.** If it were a valid issue **in vivo**, a clinically significant difference should have been perceived. When a clinical failure developed in the group with gonococcal salpingitis and a concomitant polymicrobial peritonitis, it was not the consequence of antibiotic antagonism for **Neisseria gonorrhoeae**, but rather was due to a doxycycline-resistant strain of **Bacteroides fragilis.** While no gross differences were observed, there was a possible tendency for a slightly more prolonged febrile course when the doxycycline was administered concomitantly with a bactericidal drug. It may be best that the bactericidal agent be administered 30-60 minutes before the bacteriostatic antibiotic.

Summary

Twenty-two patients with acute salpingitis and gonococcal endocervicitis were treated with a combination of a bactericidal antibiotic, penicillin, and a bacteriostatic antibiotic, doxycycline. The therapeutic response was measured by duration of fever, amelioration of physical findings and return of the white blood cell count to normal within the first 48 hours. The response was comparable to that previously documented for monomicrobial salpingitis due to **Neisseria gonorrhoeae** and treated with doxycycline alone. When a clinical failure occurred, it occurred in a patient with polymicrobial peritonitis which included a doxycycline-resistant strain of **Bacteroides fragilis**. The therapeutic responses do not indicate the occurrence of clinically significant antibiotic antagonism for **Neisseria gonorrhoeae** when penicillin and tetracycline are used in combination therapy.

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How Your Practice Can Cope With Change©

LEIF C. BECK, LL.B., CPBC
GEOFFREY T. ANDERS, J.D., CPA, CPBC
DOROTHY R. SWEENEY

WHILE so much is written these days about the future of medical practice, many physicians seem to ignore clear indications of change. This may be understandable in view of their continued clinically and financially rewarding practice situations. After all, who wants to give up a good thing merely because of predictions that things may change? "If it ain't broke, don't fix it," goes a popular saying.

That saying may be fine for a doctor who has worked hard to build a very good practice; he or she can probably ride out the era of change, though quite possibly with declining income, for five to ten years. If, however, the doctor is between age 30 and 50 or cares enough to assure continued practice success indefinitely, the changes in medical practice must be considered and accommodated.

At a recent seminar, one speaker made the following point: **"The best way to manage change is to anticipate it."** We consider this statement to be absolutely essential advice for physicians who want their practices to survive indefinitely. Since changes are so obviously under way, and much more change will come, physicians should stay closely attuned to what will probably happen.

General Conditions

With this background, here are our views on the direction of medical practice. They are not comforting to doctors who are emotionally or financially committed to the way things have been, but we believe these directions are virtually unalterable.

1. Capacity to Pay

Perhaps most significant of all, there is a clear squeezing of our national capacity to pay for the level of health care which the public has come to expect. The "entitlement" thinking of the 1960's, when the nation seemed wealthy enough to afford all sorts of benefits, has shifted to the 1980's - when our national wealth has essentially levelled off. Health care is buffeted within this much greater economic/sociologic fact, and one cannot assume any solution allowing constant growth.

Thus we have seen the beginnings of approaches designed to limit health care expenditures. DRGs and the recently enacted freeze on physicians' Medicare fees are clear examples of such efforts, as is governmental support and encouragement of alternative delivery systems such as HMOs.

Who knows what will be the next, possibly much more permanent, proposed "solution" to the economic squeeze? Perhaps capitation (payment per patient rather than per procedure) will be imposed on doctors' services. Perhaps uniform fee schedules will be imposed by the federal government, and/or by insurers and employers, just as we are already encountering a national schedule of lab fees.

We consider one development nearly certain. The fees paid for "non-cognitive procedures" will decrease significantly, since virtually all segments of society seem to agree that procedure fees are far too high. Open heart surgery, intraocular lens implantation, cardiac catheterization and fiberoptic procedures are examples of allegedly "overpriced" services.

2. Governmental Pressures

While many people predict a continued growth in governmental regulation of private medical practice, we see it a bit differently. We instead expect government's effort will be to create the conditions that will make medicine less rewarding economically. DRGs, fee schedules, HMO support and "all payers" limits on reimbursement levels are not so much regula-

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*The authors are the principal consultants and attorneys of The Health Care Group, Bala Cynwyd, Pennsylvania.

tion as they are pressures on practice economics.

Regardless of what one calls it, however, government is the "big daddy," directly and indirectly influencing doctors' incomes. There is little hope of effectively curbing that influence by court action, for physicians hardly have a constitutional right to their economic well-being. If government can regulate banks, control natural gas prices and impose laws on corporate take-overs, all of which are understood to be for the public's benefit, it can also affect medical economics.

3. Increasing Supply

Like another arm of the pincer, these restrictions on the **demand** for medical services come at a time of tremendous increase in the supply of those services. The number of physicians in practice now is vastly higher than before and the predictions for 1990 project a still higher number. While doctors tended to dismiss the projections just a couple of years ago, almost all of them now see the continually increasing number of "colleagues" - or "competitors" - in their specialties.

The pincering effect means that conflict is virtually inevitable at the physician level. It will probably result in the virtual annihilation of some ancillary medical occupations such as physicians' assistants, respiratory therapy and the like. Doctors may be happy to do the work of those people in view of the available time and the need for income.

4. Resulting Competition

These various circumstances certainly show why competition among medical providers is becoming rampant. The pincers of a shrinking pot invaded by a growing number of fingers virtually pre-ordain such competition no matter how noble the profession may be.

Much of the competition comes from so-called alternate providers. HMOs are developing virtually everywhere. In town after town, physicians hold discussion sessions to consider how they should cope with actual or rumored HMO incursions. HMOs now have some 20,000,000 patients and are predicted to have 50,000,000 by 1993. That's a lot of patients chopped off private practices' rolls.

The convenience facilities ("urgicenters," and "immediate care centers," among other titles) are also doing quite well. We know of some practices badly affected by the expanded hours and aggressive marketing which nearby facilities feature. Those new facilities are providing a feature important to consumers these days — convenience.

Hospitals are themselves delving more and more into medical practice even though it may be technically illegal. In their battle to survive, vertical integration of health care services becomes one of their possible salvations. And that integration injects hospitals right into the privately practicing physicians' turf.

But physicians' main competition comes from other physicians. Specialty-crossing is rampant as doctors seek to provide more services that might maintain their incomes (witness allergy and facial plastic surgery). Advertising is on the rapid rise and will almost inevitably continue to grow. And as "premier groups" contract for bulk patient care (discussed later), the patients gained are lost by other privately practicing doctors.

5. Antitrust Law — The Big Leagues

A prime example of inter-doctor competition and turbulence is baring itself these days. Medicine has entered the business world enough to be the hot topic in antitrust law.

Medical staff admission and privileges are vital issues for doctors on both sides — both the "ins" and those who seek to be "in". There are a number of cases which are widely known to lawyers and physicians. These cases involve millions of dollars in legal fees as well as untold potential liability if they are ultimately decided in favor of the plaintiffs involved.

Even though hospitals are co-defendants in these various lawsuits, physicians may themselves be at risk. In fact, since their medical staffs may be held liable separately from their hospitals, it is becoming essential to legally separate and incorporate the staffs. Doctors can no longer hide behind their hospitals' skirts.

Antitrust law arises in non-hospital practice situations as well. For example, while we have participated in more group mergers than ever before, some of these joiners touch the ill-defined, and still rather conjectural, antitrust rules as they might apply to health care. And yet antitrust suits are so expensive and, if lost, so economically devastating, that doctors cannot take chances. Physicians are in the "big leagues" of business when those laws are involved.

Our Prescriptions

What should the currently successful practicing physician do given this rather bleak description? Except for those who elect to ride their practices out for five or ten years, probably with declining patient volume as they move to retirement, we believe doctors should emphasize our opening key statement: **"The best way to manage change is to anticipate it."**

The changed conditions offer opportunities as well as problems. In the airline and steel industries, some companies are suffering and even dropping out while others take advantage of the conditions. We see the same scenarios in medicine, for some practices are growing and prospering despite the conditions. They have adapted to the changed game while still giving the same high quality medical care.

Here are some of the major approaches and basic philosophies we believe are essential for such success.

a. Business Planning

Doctors tend to resist the idea that hard-headed business planning makes sense in their professional practices. It cannot, however, be disregarded and it cannot be done half-heartedly.

The first part of business planning is to identify the broad goals and how they fit into both present structure and projected financial resources. The goals cannot be all-encompassing, for we find it necessary these days to establish areas of preeminence, even if other areas must be abandoned. For example, internists may have to decide if they are to be primary care doctors or referral specialists. It is becoming harder to be in both camps and prosper in either one.

As to the finally agreed planning document, there must be a reasonable consensus among the practice's players. In a solo practice, at least the manager and key staff members should accept the goals, while all physician-members of a group practice should be comfortable with the major directions. Those who are unwilling to accept and work within the business plan's broad goals should probably not stay with that doctor or group. Interestingly, business plan goals tend to be self-fulfilling to the extent that people's day-to-day actions reflect those goals.

Secondly, from the broadly stated plan should come **specific strategies** to be followed in order to achieve the goals. What steps should be taken, — moving one's office, replacing certain personnel, promoting certain aspects of the practice or opening a satellite office? And on what timetable?

As an example of this second phase of business planning, we recently followed up on a survey we had performed for a larger group practice six months earlier. The managing partner reported that the group had identified six primary goals and then set out over **sixty** specific actions to be taken. The likelihood of actually achieving their broadly stated purposes should be distinctly greater with that 60-item action plan in place.

b. "Market Share"

Given the competitive threats and the uncertainties for the next few years, we are urging an emphasis on "market share" — a practice's volume of patients as measured against the total available volume. This is not the time to lose patients for we expect the next few years to be tolerable mainly for those doctors who have a large market share.

The larger number of patients will enable a practice to keep its income up as well as possible if the fees begin to drop. Market share will certainly permit maximum possible income if the system shifts over to a capitation (payment per patient) basis. And as we see doctors and groups negotiating with hospitals, HMOs and directly with employers, a larger volume practice should translate to greater negotiating strength.

Therefore, even if a physician must accept a lower fee on some current patient work, the lesser payments may be perferable to losing those patients — to losing "market share." Therefore, we have generally favored participation in HMOs and PPOs as a means of holding onto patient volume rather than ceding the work to others. We also encouraged participation in Medicare unless the finiancial circumstances were too adverse; those doctors who elected not to participate now face the risk of adverse publicity and a possible decrease in patients.

c. Marketing Emphasis

Closely related to the "market share" point, the entire field of marketing has become a key element in one's practice. However, marketing is a far broader term than mere public relations and advertising. It involves attention to one's business from the other person's, the consumer's, point of view.

One attribute of successful business corporations is that they are "consumer driven." They focus on anticipating and selling what the consumer **wants and needs,** rather than on selling what they (the sellers) want to sell. Most major new products and services originate this way - from identifying the potential buyer's preferences rather than seller's interests.

But how does being "consumer driven" apply to physicians? As one example, we believe that health care consumers are in large part business employers, labor unions, insurance companies and the government, not individual patients. These organizations are purchasing most of the health care which physicians provide through patients. The one thing these major purchasers must have is a basically controllable and definable cost structure consistent with quality service.

Unfortunately, physicians have notoriously resisted adapting to this need, equating cost controls and fee restraints with compromises on quality of care. The better approach would be to seek ways to assure the big purchasers about their expense levels while maintaining normal emphasis on quality. If this means that a doctor or group might have to accept less than full fee work in order to serve a larger block of patients, that should be a good step.

Another example involves a demographic characteristic sometimes called the "nocturnal market." Goods and services are increasingly being demanded outside the traditional "9 to 5" hours. The banking industry has recognized this characteristic in a unique way, establishing automated teller machines which make bank services available 24 hours a day, seven days a week. However, physicians are only now beginning to shift to evening and weekend office hours. Not being consumer driven, private practitioners have preferred office hours that suited their busy lives. Until recently they had been able to "call the tune".

d. Group Practice

Unfortunately, we do not see solo practice as the way to cope with change over the long run. We have in fact predicted that there will be significantly fewer solo and even small group (two to five doctors) practices about ten years from now.

The trend towards larger practices, both single and multi-specialty, is already apparent. Groups can better allocate physician time to early mornings, late evenings, weekends and holidays than can a solo. One physician simply cannot be available all the time, but a 10 doctor group can easily provide convenience center hours.

The larger group can also spend more meaningful dollars. It can afford to hire a high-salaried administrator with an MBA degree to help steer it through complex contract negotiations. It can purchase state-of-the-art medical equipment to keep it on the "cutting edge" of its specialty. And it can maintain a large enough public relations/advertising budget to bring in additional patients, while solos spending small amounts may be unable to dent the advertising market.

We expect groups to jump in size from three to six doctor sizes up to 10 - 15 members over just the next few years. But all the practices in a service area cannot grow. In fact, the opportunities to establish the described advantages will probably arise just once in each specialty in each community. Once a group has done so, there will probably not be room for its competitors to adapt.

e. Physician Leadership

One factor in practice management never changes. Whether solo practice or group (large or small), there must be effective leadership at the physician level. Success emanates from a doctor-owner's ability to set the proper tone for the entire practice. Conversely, we often point out that every failure or weakness can and should be the fault of the practice's "CEO", its chief executive officer, or the doctor in charge.

For the sole practitioner, he or she must first identify the practice's characteristics and assure that everyone concerned will conform to them. This CEO-physician must create a consistent atmosphere so the lay staff will act according to the selected goals. Planning and strategy are useless if the doctor-leader cannot, or will not, cause all concerned to act consistently with the business plan.

We find that group practices, even if just two or three doctors, require a strong and capable leadership format to accomplish what is within reach. The most desirable structure is for a single "CEO," just as other businesses thrive or fail because of their leadership. In some practices, however, where no single physician-member fits the CEO slot, a different leadership model may be necessary. This will usually be a two or three-doctor "executive committee" specifically authorized to act as though those two or three people were, together, an individual-in-charge.

Businesses do not survive these days without good leadership, and medical practice is becoming more like other businesses. Doctors wishing to adapt to the changing health care scene need a leadership format, usually a "CEO," in order to cope.

Conclusion

As described, the circumstances for privately practicing physicians are less favorable than anytime in the past twenty years. The health care industry is not, however, alone in encountering new, rapidly changing problems. As in other business situations, these problems create opportunities as well as annoyances. Thus we see some doctors making their practices prosper within the parameters of quality patient care by being alert to the circumstances and applying modern management skills to take advantage of them.

These successful practices seem to live by a minor variation in our previously recited key sentence:

"The best way to manage in a changing environment is to anticipate and face head-on the change."

FRACTURE OF THE MONTH

Fibular Lengthening to Correct a Malunited Ankle Fracture

ROBERT DEHNE, M.D.
JOHN F. CONNOLLY, M.D.
From the combined Orthopaedic Surgery Program of the University of Nebraska Medical Center (42nd and Dewey Avenue, Omaha, NE 68105-1065); Creighton University School of Medicine, and the Veterans Administration Medical Center

THE closer an ankle is restored to normal anatomy after fracture, the better are the results and the lower are the chances of traumatic arthritis. The lateral malleolus and fibula have been shown to provde the key to reducing displaced ankle fracutres anatomically.[1,2] If the fibula is left in a shortened, externally rotated position, the talus will shift laterally distorting the usual symmetric contact surfaces of the ankle.[3] The result may then be a symptomatic, traumatic arthritis. Consequently, if at all possible, one should strive to restore fibula length and alignment using open reduction and internal fixation wherever needed. Even if the fracture is seen months or years after healing in a malreduced position, operative correction of the fibula can still be useful to relieve symptoms, as the following case illustrates.

Case Report

The patient was a 49-year-old woman who was seen four months after sustaining a trimalleolar fracture of her right ankle (Fig. 1). Initially her fracture was reduced closed (Fig. 2) and placed in a cast for eight weeks. Her chief complaint at the time of our evaluation was generalized pain over the ankle with inability to place her foot comfortably on the ground. X-rays showed the fracture healed with the fibula in a shortened, externally rotated position (Fig. 3). The ankle mortise had widened approximately 1 cm. medially. A comparison of the talocrural angle showed an angle of 8° on the injured side compared with 12° on the opposite, normal side.

Discussion

In assessing the reduction of an ankle fracture by either closed or operative techniques, the width of the joint's clear space should be the same medially as superiorly. Widening of the medial space in this patient indicated lateral displacement of the talus which was allowed by the malreduced fibula. Occasionally, a patient's fracture may heal with apparently satisfactory position on x-ray but with persistent residual pain and complaints that are difficult to diagnose and treat. These ankles should be carefully x-rayed and

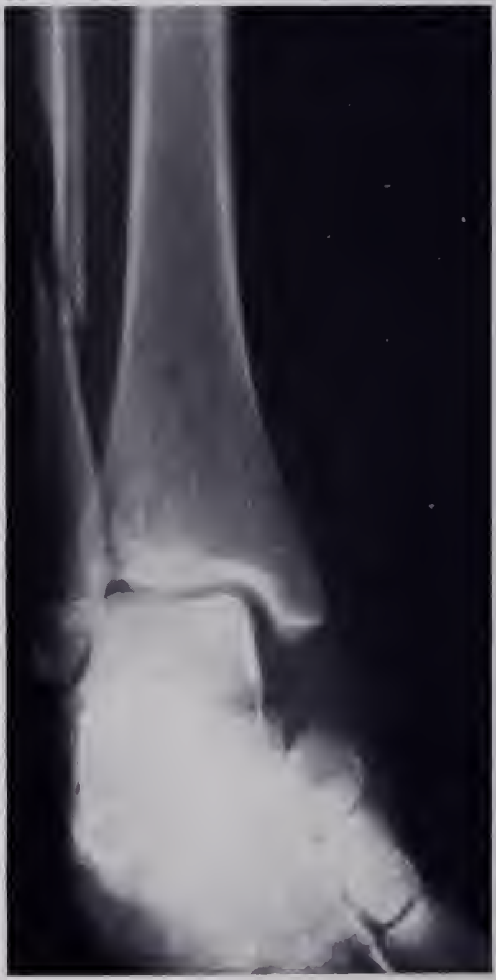


Figure 1
Radiograph showing the original fracture which resulted from a pronation, external rotation injury. Notice the widened medial joint space.

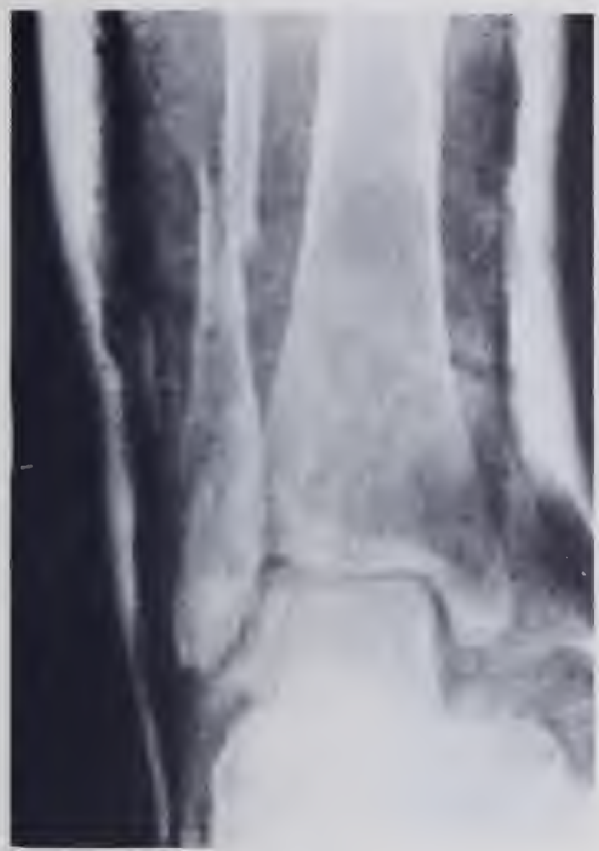


Figure 2
Radiograph in cast showing incomplete reduction but deceptively normal appearing clear space around the mortise.

scrutinized for even minimal shortening of the fibula. To do this, compare the talocrural angle[1] which is formed by the intersection of two lines, one drawn parallel to the tibial articular surface the second drawn between the tips of the two malleoli (Fig. 2). This provides a reproducible and objective method to assess reduction that is more reliable than merely measuring the clear space. The variation of the angles should be less than 2°. Greater than this difference is likely to lead to a shearing force which displaces the talus with weight bearing and causes traumatic arthritis.

In some fractures, the initial damage to the articular surface can be severe enough to lead to early arthritis despite anatomic reduction. However, for the painful ankle without evidence of arthritis but with definite distortion of the talocrural angle, lengthening and derotational osteotomy of the fibula can effectively relieve pain symptoms and prevent joint breakdown.[5]

Management:

Six months after the initial fracture, the patient underwent operative correction of her ankle malunion. The medial joint space was cleared of fibrous tissue and then through a separate incision, the distal fibula was exposed and found to be externally rotated 20°. The

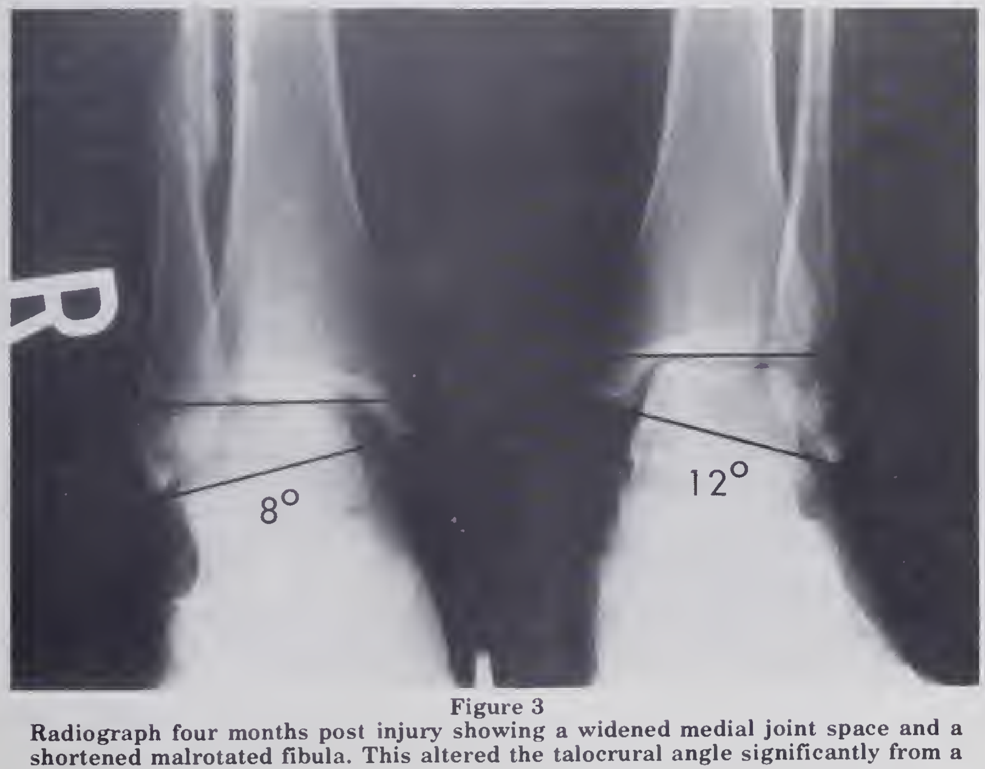


Figure 3
Radiograph four months post injury showing a widened medial joint space and a shortened malrotated fibula. This altered the talocrural angle significantly from a normal ankle (8° compared to 12°).

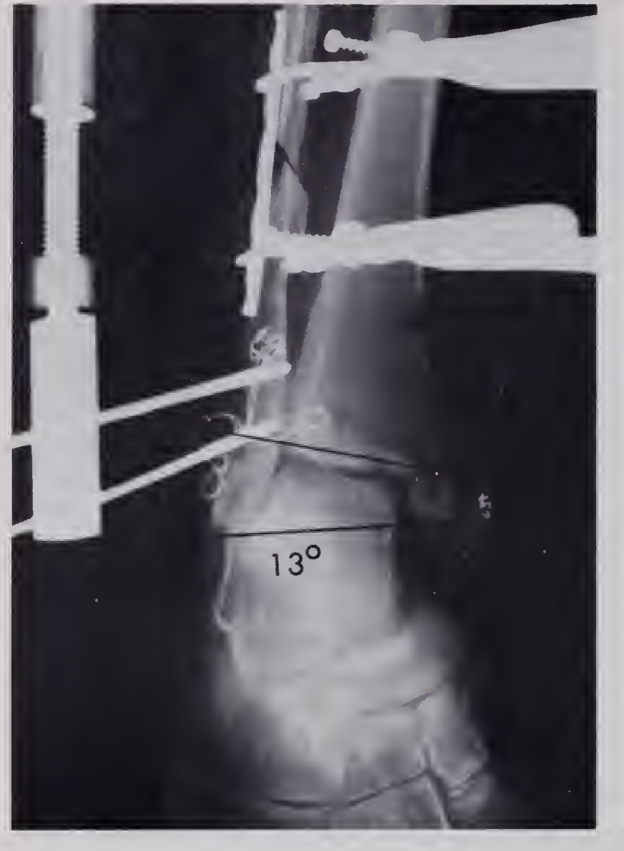


Figure 4
Intraoperative radiograph showing lengthening of shortened malrotated fibula and corrected talocrural angle.

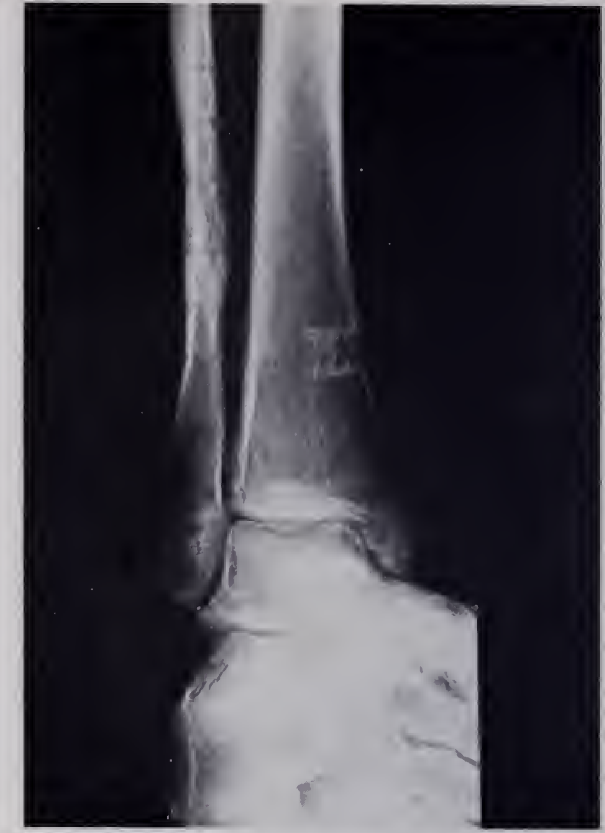


Figure 5
Radiograph at 18 months post injury demonstrating restorationof normal fibula and joint alignment. The patient's ankle symptoms had been alleviated.

fibula was osteotomized obliquely at the old fracture site and a distraction device was applied to permit lengthening and rotational correction (Fig. 3). A one centimeter graft was harvested from the medial cortex of the tibia and then placed in the gap. A six-hole plate was used to maintain the correction and comparative x-rays showed restoration of ankle mortise with normal talocrural angle (Fig. 4). Fourteen months after correction, the plate was removed and the patient's heel cord was lengthened to correct a 5° equinus contracture. At follow-up and one and one-half years post osteotomy, she had a pain-free, stable ankle with essentially normal motion. X-rays showed that the corrected position of the fibula and ankle mortise had been maintained and there was no evidence of traumatic arthritis (Fig. 5).

Although closed reduction is sometimes equated with "conservative treatment" failure to reduce the fibula is frequently not "preservative" of normal ankle function.

References

1. Connolly, JF: **Third Edition, DePalma's Management of Fractures and Dislocations,** Philadelphia, PA, W.B. Saunders, Co., 1981, pp 1835-1949.

2. Ramsey PC, Hamilton W: Changes in tibiotalar area of contact caused by lateral talar shift. J Bone Joint Surg, 58A:356, 1976.

3. Yablon IG, Heller, FG, Shause L: The key role of the lateral malleolus in displaced fractures of the ankle. J Bone Joint Surg, 55A:169, 1973.

4. Saviskan JS, Cody GW: Closed treatment of ankle fractures: A new criteria for evaluation. A review of 250 cases. J Trauma, 16:323, 1976.

5. Weber BG, Simpson LA: Corrective lengthening osteotomy of the fibula. Clin Orthop 199:61, 1985.

President's Page

Thanksgiving and the Holiday Season seems a proper time to look at and assess our lives in medicine, and it would appear that we have much to be thankful for.

While we are being pressured by ever increasing demands of third-party payors, government tampering and restrictions, committees, and hospital staff work, we still enjoy the privileges and freedom to practice where we wish and in whatever chosen field of medicine we have selected.

The increasing supply of physicians is causing concern about a surplus in some areas, but generally, throughout the state and particularly in the rural areas, we have not exceeded the ideal physician-patient population ratio. An advantage of the increased number of physicians is that our hours are now better and we can spend more time with our families and in other pursuits than was possible during the physician shortage era. With the growth of group practices, we can more easily afford to take time for continuing medical education, and through coverage by others in the practice, be assured that our patients will be receiving adequate and quality coverage in our absence. We have much more extensive training than did our predecessors, and with the ready availability of consultants, we can feel comfortable that we are offering our patients the best that is available in medical care.

We are hearing more about "marketing" in the field of medicine. This approach has always been foreign to what we have felt was proper conduct in the physician-patient relationship. However, competition has always proven to be healthy in our system and I am confident that we will adapt and do well. We must be concerned with the ethics and proper restraints to avoid commercialization of the physician-patient relationship.

Hiram R. Walker, M.D.

Nationwide, the average age of the practicing physician has been declining. With the increase in the younger physician age group, there is more emphasis being placed on increasing their involvement in organized medicine. Both at the national level and the state level, young physicians' (under age 40 or less than 5 years practice) commissions are being established. This is to be encouraged and has the potential to add increased strength to our organization. We need the involvement of the younger physician to breathe new life into our organizations and avoid the connotation of good-ole-boys group.

The economic forecasters are predicting a gradual decline in the physicians' income for the future. In comparison with other occupations, unless you can run the 40 yard dash in 4.3 seconds or happen to be 7 ft. tall with a good hook-shot, we have been and should continue to be in a very fortunate position.

To finish this message, I would like to quote from an article by Ben M. Nail, M.D. in the Southern Medical Journal — "At any rate, medicine will continue. It will maintain its position at the top of the learned professions, and continue to serve as long as people need physicians; so let us hope the majority of them at the end of the line are able to say with St. Paul, 'I have fought a good fight, I have finished my course, I have kept the faith.'"

Hiram R. Walker, M.D.
President

The Auxiliary

After visiting half of the county auxiliaries and having the Nebraska Medical Association Auxiliary fall meeting and workshop, and then the American Medical Association Auxiliary Leadership Confluence in Chicago, September has gone by rapidly.

Colleen Adams, Desta Osborne, Linda Brown and myself had the privilege to be entertained and visit county auxilians in North Platte, McCook, Ogallala, Scottsbluff, Sidney, Norfolk, Imperial and Blair. Everyone was so gracious and excited to have us visit. We were able to make some suggestions for activities, encourage membership and answer questions and concerns. It was very rewarding and a chance to make new friendships across the state.

On September 24 Diane Hinderliter and AMA Auxiliary North Central Director presented a workshop on Volunteer Leadership. She had many tips and suggestions to leaders in the volunteer world. The following are some of the thought provoking quotes: "Judge other people by their actions, while we judge yourself by your intentions"; "Different is not wrong, different is different"; "Success is getting what you want and happiness is liking what you get"; "Timing is everything"; "Listen the first time then you will not have to listen again. Everyone has an opinion". Thank you Diane for a very inspirational and informative morning. This was followed by our slide show, "Auxilians in Action", a collection of county and state auxiliary activities. Thanks to Helen Krause, Ardis Grace and Desta Osborne and all who contributed to put the show together.

Then it was on to Chicago to attend the AMA Auxiliary Long Range Planning Committee of which I am an ad-hoc member.

On September 27 Colleen Adam, Rita Seiler, Marge Little and myself had the opportunity to attend the AMA Auxiliary Leadership Confluence. At this meeting speakers from the American Medical Association were John Coury, Jr., M.D., President of the American Medical Association, James Sammons, M.D., James Todd, M.D., Vice Presidents. All encouraged the Auxiliary to join them in various programs.

Leadership topics presented ranged from parliamentary procedure, working with the media, speaking effectively, marketing membership and preparing for the presidency. All of the participants at the conference are presidents or presidents-elect at either the state or county level so the programs are very timely and very well presented.

Topics to be used for programs on Impairment-The Medical Family, Legislation, AMPC, Seat Belt Usage, and AIDS Education. I attended the sessions on Legislation, Seat Belts and AIDS Education. I have additional information on these programs if you are interested in any of the programs.

One of the highlights of this meeting is the opportunity to meet leaders from all of the other states and counties from all over the United States. On Sunday evening of the conference, each state presented an exhibit from their states activities. This idea exchange is very informative and interesting.

I would like to thank the NMA Auxiliary for the privilege of attending this meeting the last three years. The following are reports from the county president-elects that attended the AMA Auxiliary Leadership Confluence.

Bev Kruger

* * *

LEADERSHIP CONFLUENCE 1986, by the AMA Auxiliary, provided a revitalizing forum to share ideas through meeting other state and county presidents and presidents-elect and by attending sessions where experts taught us leadership skills and by hearing leaders of the AMA speak.

As this country has been forced to face up to some agonizing circumstances, we have witnessed, and will continue to see under economic strains and Gramm-Rudman, a dramatic and revolutionary reordering of government priorities that will effect all our lives. But it is just possible that therein may lie opportunities for state and county auxiliaries so tantalizing and explosive as to boggle the mind if we but have the vision and the courage to seize the moment. There is in our country a resource that can make a difference - it is the **collective strength of auxiliarians,** women and men spouses of physicians.

Can you name any other such pool of energy, talent, imagination, creativity and vitality that we would, intentionally or inadvertently, simply allow to remain capped? The release of this force would contribute beyond measure.

Leadership confluence helped us share ideas about how to release this force.

Through auxiliary volunteer work and personal contact with the public we let people know what physicians and their families are really like and how we care.

Through fund raising, such as MOMSA's Kitchen Tour, we make an impact on community organizations that face the economic impact of government. Through education projects we help the public be more aware of important ways to help themselves protect their health. As a new example, as explained to us at confluence, the AMA and GM have developed together a video and materials on seat belt usage to dismiss the myths about not using them. Through coalitions with other community organizations we can expand our impact, as MOMSA has through helping form the Organ Donor Task Force. Through our contributions to AMPAC and volunteer work for voter registration we can help. As the leader of the AMPAC session said, only 51% of doctors are registered to vote and of those only 25% vote. He also told us the rules of how things get done in Washington have changed. It takes $2.7 million to run for Congress, but only 14% of all Americans make a political contribution. Therefore through auxiliary, and the AMA's group efforts we can let the candidates know physicians philosophy, develop access to the congressmen, get credibility and have accountability of the members of congress. Through lobbiest and auxiliaries phone bank legislative efforts we can let congressmen know local perspectives and they cannot confuse what issues we support. This force of auxiliaries would affect the quality of medical care. As John J. Coury, M.D., Pres. of AMA told us, only physicians really understand quality of care and issues of cost effectiveness. He said, "Quality is not negotiable". As lawmakers and others try to change health care, the auxiliary like no other group, cares what is done to health care.

So it will require more than lipservice, particularly from those who are cast into positions of leadership. As auxilians we have to become knowledgeable of the changes being made, be ready to take action. If we really believe in a brighter future, we may just have to rock the boat a little, but the understanding and the implementation of full partnership for auxiliaries and physicians for quality medical care is an idea whose time has come. Think of the bacon and eggs you may have had for breakfast. The chicken was involved and the pig was committed. Auxiliaries need to be involved and committed and are that uncapped source already going to work.

Rita Seiler, Metro Omaha
Medical Society Auxiliary
President-Elect

* * *

Confluence 1986

Try to envision a three day "school" where you can learn facts about AIDS that your spouse hasn't read in the New England Journal, where you can learn more about teenage drug abuse and paraphernalia than your teenager knows, and where you can be filled in about AMA legislative efforts directly from the experts involved. That is "Confluence".

It's hard to describe the effect that the AMAA Leadership Confluence has on the physician spouses who are fortunate enough to have this three day experience. I left feeling much more aware of what's happening in medicine today and how we as physician's spouses can help to maintain the quality of health care in our own communities. At the same time we were filled with an awareness of the need for our involvement in the legislative arena and a feeling that we **can** make a difference.

Tips on how to work effectively with the media were particularly helpful. Informing the public about health care issues and physician's efforts to maintain and improve the excellent health care we all enjoy is a vital task today. Instead of trying to convince our local media sources that they **should** cover our activiites, we need to look for an angle that gives our subjects a newsworthy appeal that they're anxious to capture. There is a challenge in working with the media, but it need not be a frustrating experience if we approach it with creativity and a positive attitude.

Sessions on speaking effectively, preparing for the presidency, innovative and quality programming, and parliamentary procedure shook the cobwebs off some of the leadership skills already possessed and planted seeds for growth. The enthusiasm we gained from sharing ideas and information with physician spouses from all over the country has awakened new dreams. The legislative update and messages delivered by executive officers of the AMA emphasized the need for auxilians to truly fulfill our role as **partners** in the unified goal of protecting and improving health care.

CONFLUENCE . . . a real influence on me to do my part as a physician's spouse and leader of a terrific group of local auxilians who are full of potential. Thank you for this exciting experience!!

Marje Little, Hastings

Welcome New Members

Blake A. Butler, M.D.
1138 Miller St.
Holdrege, NE 68949

Toma J. Jankov, M.D.
109 E. Second
Tilden, NE 68781

Robert S. Anderson, M.D.
313 W. 38th
Scottsbluff, NE 69361

Richard Reiner, M.D.
1315 Tibbals St.
Holdrege, NE 68949

Joyce Troyer, M.D.
1002 Water, Box F
St. Edward, NE 68660

Terry Troyer, M.D.
1002 Water, Box F
St. Edward, NE 68660

Gregg A. Peterson, M.D.
710 W. Koenig
Grand Island, NE 68801

Richard P. Votta, M.D.
109 N. 15th St.
Norfolk, NE 68701

Gordon L. Emry, M.D.
1803 Papio Lane
Cozad, NE 69130

Mark P. Woodruff, M.D.
601 N. 30th St.
Omaha, NE 68131

Marden L. Brown, M.D.
Arapahoe, NE 68922

Ronald P. Morse, M.D.
120 So. 9th
Tekamah, NE 68061

David S. Weeks, M.D. (reinstated)
8258 Hascall St.
Omaha, NE 68124

Priscilla L. Ruhe, M.D.
753 No. 21st
Blair, NE 68008

Therese M. Safranek, M.D.
211 No. Engdahl
Oakland, NE 68045

Coming Meetings

UNIVERSITY OF NEBRASKA

ADVANCED TRAUMA LIFE SUPPORT — November 3-4, 1986. Omaha, Nebraska. Registration Fee: $475. 14.5 Hours AMA Category I. 16.0 Prescribed Hours AAFP. 15.0 Hours ACEP Category I. For further information, contact Cindy S. Hanssen, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE - ALPHA OMEGA ALPHA — Business Meeting and Election — Wednesday, Nov. 5, 1986, 7:30 p.m. at the UNMC Campus, Center for Continuing Education Amphitheater, Omaha. Refreshments. All AOA Alpha members are encouraged to attend.

33RD ANNUAL SCIENTIFIC MEETING - NEBRASKA OB-GYN SOCIETY — December 4, 5, 6, 1986 at the MGM Grand Hotel, Las Vegas, Nevada. 9 Hours Credit. Fee: $200. Contact: Dennis Beavers, M.D., 720 N. 87th Street, Omaha, Nebraska 68114, (402) 390-1200.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE - ALPHA OMEGA ALPHA — December AOA Day, Wednesday, Dec. 10, 1986 at the UNMC Campus, Omaha. Convocation at 12 noon in CCE Amphitheater. Speaker M. Therese Southgate, M.D., Deputy Editor of **The Journal of the American Medical Association,** of Chicago, Ill. Convocation title: "Some Affinities Between Art and Medicine". Reception for AOA Nominees, 5:30-7:00 p.m., in CCE Lobby, UNMC Campus, Dec. 10. Other AOA Day activities to be announced.

7TH ANNUAL MEDICAL & SKI CONFERENCE — "Diagnostic Dilemmas: The Approch and the Answers" — February 15-19, 1987 at the Keystone Conference Center, Keystone, Colorado. Sponsored by the Univeristy of Nebraska College of Medicine Department of Internal Medicine. Program is being offered to physicians at the same time that the College of Nursing is offering a nursing ski conference and the College of Dentistry will be offering their annual Dental Ski Conference. Approved for 16 hours of AMA Category I and AAFP prescribed hours. For more information contact Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telphone (402) 559-4152.

36TH ANNUAL OB-GYN CONFERENCE — March 12-13, 1987 at the Holiday Inn Central, Omaha, Nebraska. Fee: TBA. Contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, Omaha, Nebraska 68105. (402) 559-4152.

FAMILY PRACTICE REVIEW - A COMPREHENSIVE UPDATE — March 30-April 10, 1987 and April 27-May 8, 1987 at Omaha, Nebraska. Sponsored by the University of Nebraska College of Medicine. Registration Fee: $850. (One week registration available with special arrangements). Contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebrask 68105. Phone: (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

LEGAL MEDICINE: THE NEW SOLUTION — Jan. 18-24, 1987 — Sponsored by University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Location: Puerto Vallerta, Mexico. 16 Category I AMA, AAFP credit hours.Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

INTERNAL MEDICINE SYMPOSIUM — Mar. 1-7, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. 18 Category I AMA, AAFP credit hours. Location: Cancun, Mexico. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

COMMON PROBLEMS IN GASTROENTEROLOGY — Mar. 16, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP. Location: TBA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

SAM E. ROBERTS NUTRITION — Mar. 31, 1987 — University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

WHAT'S NEW IN DIABETES — Apr. 1, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th & Rainbow, Kansas City, KS. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

PEDIATRICS — Apr. 2-3, 1987 — Sponsored by the University of Kansas Medical Center. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

37TH ANNUAL ANESTHESIOLOGY SYMPOSIUM — Apr. 24-26, 1987 — Sponsored by the University of Kansas Medical Center. Location: Crown Center Hotel, Kansas City, Missouri. Credit: AMA, AAFP, AANA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

KANSAS MEDICINE — May 15, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA and AAFP. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

CREIGHTON UNIVERSITY

CURRENT CONCEPTS IN OPHTHALMOLOGY — Dec. 6, 1986 — Marriott Hotel, Omaha, Nebraska. Program Director: Ira Priluck, M.D.

1987

CORONARY HEART DISEASE AND HYPERTENSION — Feb. 1-6, 1987 — Freeport, Bahamas. 28 credit hours in Category 1. 28 Prescribed hours A.A.F.P. Registration fee $375.00 prior to Nov. 1; $450.00 after Nov. 1, 1986.

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17, 1987 — Wyndham Rose Hall Beach Motel, Montego Bay, Jamaica. 24 credit hours in Category 1. Enrollment limited to 20. Registration fee $475.00.

ADVANCES IN ANTITHROMBOTIC THERAPY — Mar. 14, 1987 — Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

FLORIDA TUTORIAL (OB-GYN) — Mar. 26-27, 1987, Airport Marriott Hotel, Orlando, Florida, Program Director: Gilles R.G. Monif, M.D.

THE ROLE OF ECHOCARDIOGRAPHY IN THE DIAGNOSIS AND MANAGEMENT OF CARDIAC EMERGENCIES — Apr. 10-11, 1987, Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

MAURICE E. GRIER SYMPOSIUM (OB-GYN) — June 6, 1987, Marriott Hotel, Omaha, Nebraska. Program Director: James W. Daly, M.D.

For further information or to register, contact: Creighton University School of Medicine Division of CME, Omaha, NE 68178, 402-280-2550 or outside Nebraska Toll Free 800-228-7212, Ext. 2550.

BOONE HOSPITAL CENTER

1986 NATIONAL INSTITUTE ON HEALTH CARE LEADERSHIP AND MANAGEMENT — Nov. 17-21, 1986 — Marriott's Grand Hotel Resort, Point Clear, Alabama. A nine course selection in advanced leadership training. 14-28 CME credits. For more information please contact Sherry Mason, American Academy of Medical Directors, 4830 W. Kennedy Blvd., Suite 648, Tampa, FL 33609, telephone (813) 873-2000.

UPCOMING UNMC CONTINUING EDUCATION COURSES

ADVANCED CARDIAC LIFE SUPPORT — Nov. 17, 1986 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Dec. 3-4, 1986 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Jan. 13-14, 1987 — Initial Certification Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 10, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 11, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Mar. 10-11, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Apr. 15, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 18-19, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 20, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — June 1, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

For further information, contact Ann Fitzgerald, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152. In Nebraska, call: 800-228-1095. All other states (except Alaska), call: 800-228-9630.

LANCASTER COUNTY MEDICAL SOCIETY

"CLINICAL UPDATE - II—November 8, 1986 (Saturday), Villager Convention Center, 5200 "O" St. - Lincoln, NE. This "Clinical Update - II" will be a continuing medical education program designed to address and update the care of patient health care problems presenting in primary care M.D. offices on a day-to-day basis. It is anticipated that the program will be reviewed and accepted for 6 prescribed hours by the American Academy of Family Practice. As an organization accredited for continuing medical education, the medical education committee - Lancaster County Medical Society designates this continuing medical education activity as meeting the criteria for 6 credit hours in category I of the Physicians Recognition Award of the American Medical Association. Contact: P. D. Duensing, Ed.D. - Executive Secretary, Lancaster County Medical Society, (402) 474-2405.

NATIONAL JEWISH CENTER FOR IMMUNOLOGY AND RESPIRATORY MEDICINE

TRIBUTE TO HYMAN CHAI, M.D. — January 10-14. National Jewish Center for Immunology and Respiratory Medicine Keystone Summit at Keystone, Colorado. Topics: Allergy, Asthma, Pharmacology, Advances in Immunology, Diagnostic Testing and more. Fee: $325. $165 for Allied Health and Physicians in Training. 15.5 hours of AMA Category 1 Credit. For more information contact: Jeri Wagner, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206. 303-398-1000.

Picture Gallery

NEBRASKA MEDICAL ASSOCIATION

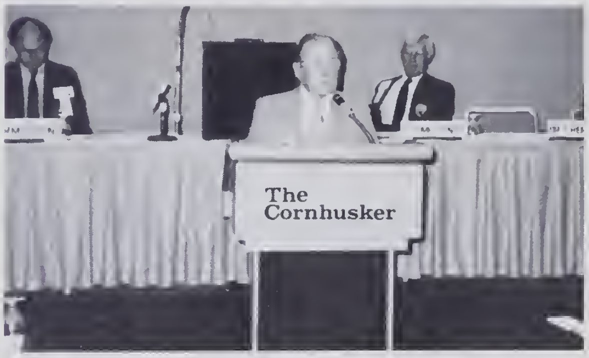
1986
Fall Session

Dr. Robert H. Waldman addressing the House of Delegates.

Dr. Hiram R. Walker addressing the House of Delegates.

Dr. Gregg F. Wright addressing the House of Delegates.

Dr. Hiram R. Walker presenting recognition plaque to Dr. Harry W. McFadden.



Dr. John D. Coe addressing the House of Delegates.

Dr. Harry W. McFadden addressing the House of Delegates.

Mr. Joe Williams addressing the House of Delegates.

Mr. Dick Borchert addressing the House of Delegates.

House of Delegates Reference Committee

House of Delegates Reference Committee

House of Delegates Reference Committee

Dr. Thomas H. Wallace presenting Reference Committee report.

Dr. M. Jack Mathews presenting Reference Committee report.

Dr. James H. Dunlap presenting Reference Committee report.

Dr. Roger P. Massie presenting Reference Committee report.

Dr. William A. Doering presenting Reference Committee report.

Dr. Carl J. Cornelius addressing the House of Delegates.

Dr. Richard H. Meissner presiding at House of Delegates session.

Dr. Louis J. Gogela addressing the House of Delegates.

Dr. Kenton L. Shaffer addressing the House of Delegates.

Dr. Stanley F. Nabity addressing the House of Delegates.

Dr. Dennis G. O'Leary addressing the House of Delegates.

AMA News Notes

Physicians appear to be spending more time with individual patients, the Socioeconomic Monitoring System of the AMA Center for Health Policy Research reported. The AMA's 1985 core survey found that physicians are devoting as much time in patient care this year as they were in 1984 — about 51 hours per week — even though they are seeing slightly fewer patients. Last year's 2.5% decline in weekly patient visits per physician continues an 11-year trend toward smaller patient loads. Patient loads have been decreasing steadily since 1975 as more physicians enter the medical profession. Today's typical physician reports about 117.5 visits with patients each week. The 1985 survey of 4,040 non-federal patient care physicians also showed that the average physician spent 7.1% fewer hours on hospital rounds, while hours for office visits increased only slightly (1.6%) during the first half of 1985 when compared with the first half of 1984. The decrease in physician hours spent on hospital rounds, coupled with only a slight increase in office visits, implies that physicians are working more in emergency rooms, outpatient clinics, and other non-office settings, an SMS spokesman said.

* * *

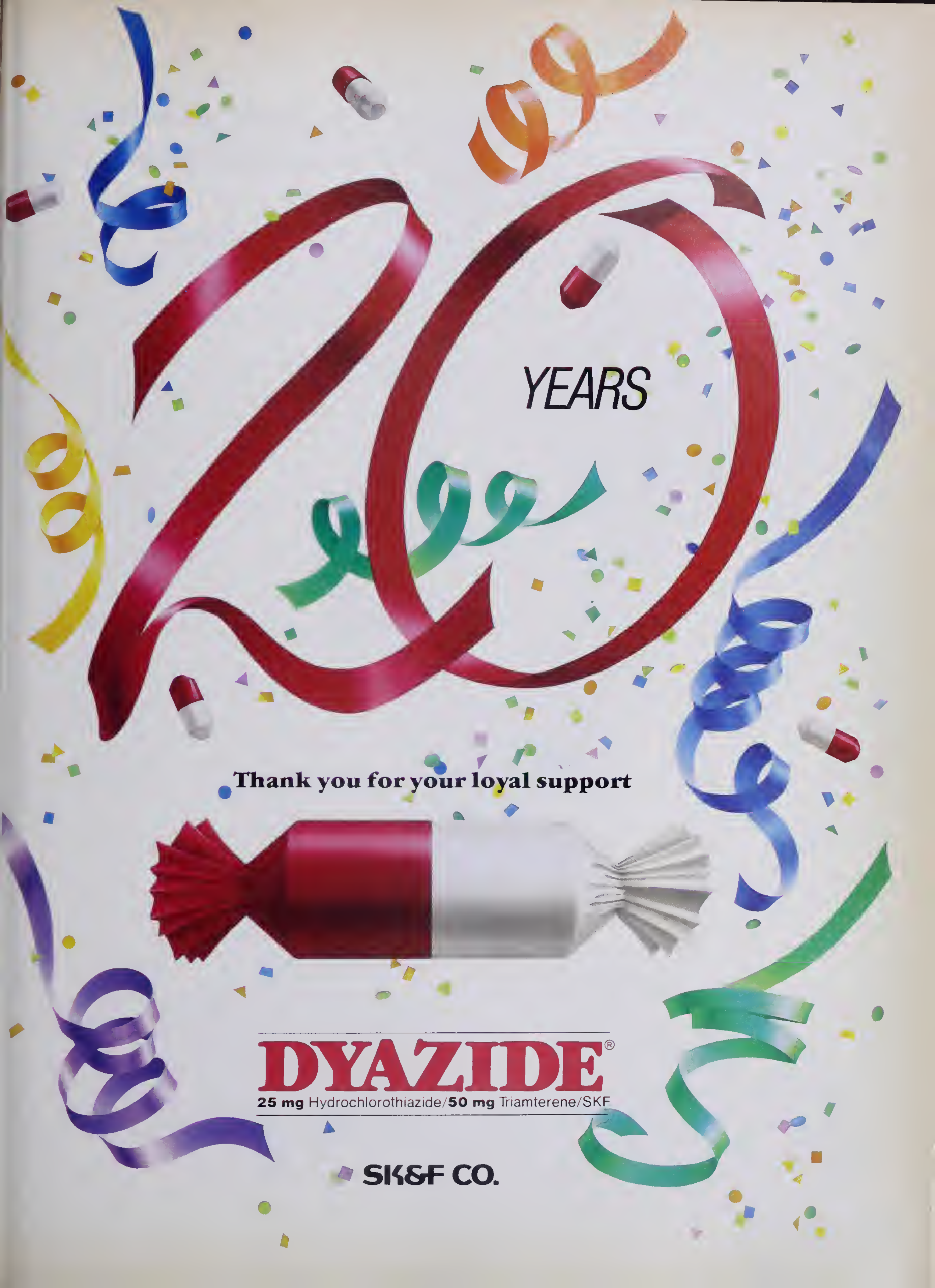
AMA officials and representatives from Harvard U. held a meeting in August to answer questions from medical specialty societies regarding the Harvard project to determine relative value scales (RVS) for physician services.

In remarks to the more than 50 society representatives, AMA Senior Deputy Executive Vice President James S. Todd, M.D., said that the purpose of the meeting was to explain the methodology and status of the RVS project, and to provide opportunities for dialog between the specialties and those involved in the study. "It was and remains our conclusion that a schedule of physician payments, based on an appropriate RVS, and without mandatory assignment, could provide an appropriate and equitable basis for Medicare physician reimbursement," Dr. Todd said.

William C. Hsiao, Ph.D., and Edmund R. Becker, Ph.D., both from Harvard, and the project's principal investigator and director, respectively, explained the potential uses of the resource-based RVS.

* * *

Efforts are under way to obtain more congressional sponsors for the AMA's tobacco advertising ban bill, introduced by Rep. Mike Synar (D, Okla.). Currently, 24 House members have co-signed, and the goal is to add as many as possible as a prelude to reintroduction of the bill in the next session of Congress. Those who co-sponsor now most likely will add their names automatically at reintroduction. Rep. Mike Lowry (D, Wash.) has endorsed AMA efforts and may assist in the search for more sponsors.



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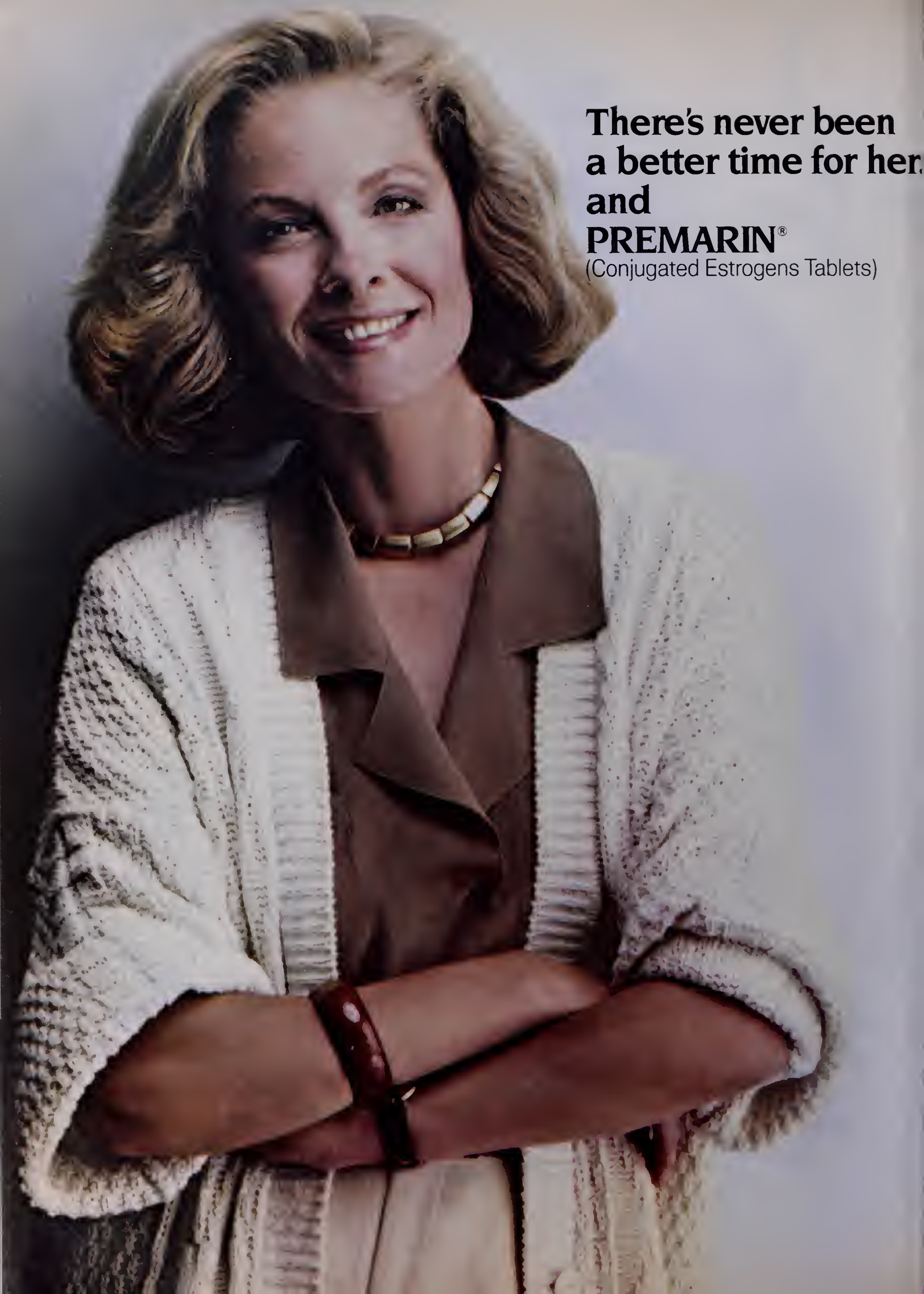
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PREMARIN®
(Conjugated Estrogens Tablets)

Now the evidence looks better than ever

Significantly reduced risk of endometrial hyperplasia

Endometrial hyperplasia was significantly reduced when progestin was added to PREMARIN therapy for more than ten days a month.[1-4] The risk of endometrial hyperplasia may also be reduced through cyclic administration of unopposed, low-dose PREMARIN.

Effect on lipids—an important feature

PREMARIN used alone does not adversely affect lipid levels. In fact, a clinical study has shown a significant increase in HDL cholesterol—from 49.7 mg/dL to 56.4 mg/dL—and decrease in LDL cholesterol—from 165.1 mg/dL to 138.1 mg/dL—after one year of therapy with PREMARIN, 0.625 mg.[5]

Low-dose control of menopausal symptoms*

PREMARIN effectively relieves vasomotor symptoms, such as hot flashes. When estrogen deficiency is limited to atrophic vaginitis, PREMARIN® (conjugated estrogens) Vaginal Cream restores the vaginal environment to its premenopausal state.

The most widely used, most extensively studied estrogen worldwide.

PREMARIN®

(Conjugated Estrogens Tablets)

Most trusted for more reasons

*PREMARIN is indicated for moderate-to-severe vasomotor symptoms.

Please see following page for brief summary of prescribing information.

For moderate-to-severe vasomotor symptoms

PREMARIN®

(Conjugated Estrogens Tablets)

0.3 mg 0.625 mg 0.9 mg 1.25 mg 2.5 mg

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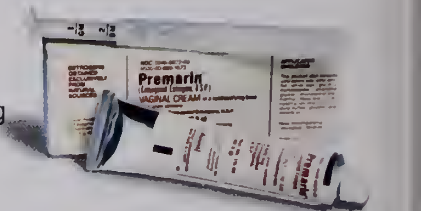
For atrophic vaginitis

PREMARIN®

(Conjugated Estrogens)

Vaginal Cream

0.625mg/g



BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION AND PATIENT INFORMATION, SEE PACKAGE CIRCULARS.)*

PREMARIN® Brand of conjugated estrogens tablets, USP
PREMARIN® Brand of conjugated estrogens Vaginal Cream in a nonliquefying base

> 1. ESTROGENS HAVE BEEN REPORTED TO INCREASE THE RISK OF ENDOMETRIAL CARCINOMA.
>
> Three independent case control studies have reported an increased risk of endometrial cancer in postmenopausal women exposed to exogenous estrogens for more than one year. This risk was independent of the other known risk factors for endometrial cancer. These studies are further supported by the finding that incidence rates of endometrial cancer have increased sharply since 1969 in eight different areas of the United States with population-based cancer reporting systems, an increase which may be related to the rapidly expanding use of estrogens during the last decade. The three case control studies reported that the risk of endometrial cancer in estrogen users was about 4.5 to 13.9 times greater than in nonusers. The risk appears to depend on both duration of treatment and on estrogen dose. In view of these findings, when estrogens are used for the treatment of menopausal symptoms, the lowest dose that will control symptoms should be utilized and medication should be discontinued as soon as possible. When prolonged treatment is medically indicated, the patient should be reassessed on at least a semiannual basis to determine the need for continued therapy. Although the evidence must be considered preliminary, one study suggests that cyclic administration of low doses of estrogen may carry less risk than continuous administration, it therefore appears prudent to utilize such a regimen. Close clinical surveillance of all women taking estrogens is important. In all cases of undiagnosed persistent or recurring abnormal vaginal bleeding, adequate diagnostic measures should be undertaken to rule out malignancy There is no evidence at present that "natural" estrogens are more or less hazardous than "synthetic" estrogens at equiestrogenic doses
>
> 2 ESTROGENS SHOULD NOT BE USED DURING PREGNANCY.
>
> The use of female sex hormones, both estrogens and progestogens, during early pregnancy may seriously damage the offspring It has been shown that females exposed in utero to diethylstilbestrol, a non-steroidal estrogen, have an increased risk of developing in later life a form of vaginal or cervical cancer that is ordinarily extremely rare. This risk has been estimated as not greater than 4 per 1,000 exposures. Furthermore, a high percentage of such exposed women (from 30% to 90%) have been found to have vaginal adenosis, epithelial changes of the vagina and cervix Although these changes are histologically benign, it is not known whether they are precursors of malignancy. Although similar data are not available with the use of other estrogens, it cannot be presumed they would not induce similar changes. Several reports suggest an association between intrauterine exposure to female sex hormones and congenital anomalies, including congenital heart defects and limb reduction defects. One case control study estimated a 4.7-fold increased risk of limb reduction defects in infants exposed in utero to sex hormones (oral contraceptives, hormone withdrawal tests for pregnancy, or attempted treatment for threatened abortion). Some of these exposures were very short and involved only a few days of treatment. The data suggest that the risk of limb reduction defects in exposed fetuses is somewhat less than 1 per 1,000 In the past, female sex hormones have been used during pregnancy in an attempt to treat threatened or habitual abortion. There is considerable evidence that estrogens are ineffective for these indications, and there is no evidence from well controlled studies that progestogens are effective for these uses. If PREMARIN is used during pregnancy, or if the patient becomes pregnant while taking this drug, she should be apprised of the potential risks to the fetus, and the advisability of pregnancy continuation.

DESCRIPTION: PREMARIN (conjugated estrogens, USP) contains a mixture of estrogens, obtained exclusively from natural sources, blended to represent the average composition of material derived from pregnant mares' urine. It contains estrone, equilin, and 17α-dihydroequilin, together with smaller amounts of 17α-estradiol, equilenin, and 17α-dihydroequilenin as salts of their sulfate esters Tablets are available in 0.3 mg, 0.625 mg, 0.9 mg, 1.25 mg, and 2.5 mg strengths of conjugated estrogens. Cream is available as 0.625 mg conjugated estrogens per gram.

INDICATIONS AND USAGE: PREMARIN (conjugated estrogens tablets, USP): Moderate-to-severe *vasomotor* symptoms associated with the menopause (There is no evidence that estrogens are effective for nervous symptoms or depression without associated vasomotor symptoms and they should not be used to treat such conditions) **Osteoporosis (abnormally low bone mass).** Atrophic vaginitis. Kraurosis vulvae Female castration

PREMARIN (conjugated estrogens) Vaginal Cream is indicated in the treatment of atrophic vaginitis and kraurosis vulvae. PREMARIN HAS NOT BEEN SHOWN TO BE EFFECTIVE FOR ANY PURPOSE DURING PREGNANCY AND ITS USE MAY CAUSE SEVERE HARM TO THE FETUS (SEE BOXED WARNING).

Concomitant Progestin Use: The lowest effective dose appropriate for the specific indication should be utilized Studies of the addition of a progestin for 7 or more days of a cycle of estrogen administration have reported a lowered incidence of endometrial hyperplasia Morphological and biochemical studies of the endometrium suggest that 10 to 13 days of progestin are needed to provide maximal maturation of the endometrium and to eliminate any hyperplastic changes Whether this will provide protection from endometrial carcinoma has not been clearly established. There are possible additional risks which may be associated with the inclusion of progestin in estrogen replacement regimens (See PRECAUTIONS) The choice of progestin and dosage may be important; product labeling should be reviewed to minimize possible adverse effects.

CONTRAINDICATIONS: Estrogens should not be used in women (or men) with any of the following conditions: 1 Known or suspected cancer of the breast except in appropriately selected patients being treated for metastatic disease 2 Known or suspected estrogen-dependent neoplasia 3 Known or suspected pregnancy (See Boxed Warning). 4 Undiagnosed abnormal genital bleeding 5 Active thrombophlebitis or thromboembolic disorders 6 A past history of thrombophlebitis, thrombosis, or thromboembolic disorders associated with previous estrogen use (except when used in treatment of breast or prostatic malignancy).

WARNINGS: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, cervix, vagina, and liver There are now reports that estrogens increase the risk of carcinoma of the endometrium in humans (See Boxed Warning) At the present time there is no satisfactory evidence that estrogens given to postmenopausal women increase the risk of cancer of the breast, although a recent study has raised this possibility There is a need for caution in prescribing estrogens for women with a strong family history of breast cancer or who have breast nodules, fibrocystic disease, or abnormal mammograms. A recent study has reported a 2- to 3-fold increase in the risk of surgically confirmed gallbladder disease in women receiving postmenopausal estrogens

Adverse effects of oral contraceptives may be expected at the larger doses of estrogen used to treat prostatic or breast cancer or postpartum breast engorgement, it has been shown that there is an increased risk of thrombosis in men receiving estrogens for prostatic cancer and women for postpartum breast engorgement Users of oral contraceptives have an increased risk of diseases, such as thrombophlebitis, pulmonary embolism, stroke, and myocardial infarction Cases of retinal thrombosis, mesenteric thrombosis, and optic neuritis have been reported in oral contraceptive users An increased risk of postsurgery thromboembolic complications has also been reported in users of oral contraceptives If feasible, estrogen should be discontinued at least 4 weeks before surgery of the type associated with an increased risk of thromboembolism, or during periods of prolonged immobilization Estrogens should not be used in persons with active thrombophlebitis, thromboembolic disorders, or in persons with a history of such disorders in association with estrogen use They should be used with caution in patients with cerebral vascular or coronary artery disease Large doses (5 mg conjugated estrogens per day), comparable to those used to treat cancer of the prostate and breast, have been shown to increase the risk of nonfatal myocardial infarction, pulmonary embolism and thrombophlebitis When doses of this size are used, any of the thromboembolic and thrombotic adverse effects should be considered a clear risk

Benign hepatic adenomas should be considered in estrogen users having abdominal pain and tenderness, abdominal mass, or hypovolemic shock. Hepatocellular carcinoma has been reported in women taking estrogen-containing oral contraceptives. Increased blood pressure may occur with use of estrogens in the menopause and blood pressure should be monitored with estrogen use. A worsening of glucose tolerance has been observed in patients on estrogen-containing oral contraceptives For this reason, diabetic patients should be carefully observed Estrogens may lead to severe hypercalcemia in patients with breast cancer and bone metastases

PRECAUTIONS: Physical examination and a complete medical and family history should be taken prior to the initiation of any estrogen therapy with special reference to blood pressure, breasts, abdomen, and pelvic organs, and should include a Papanicolaou smear. As a general rule, estrogen should not be prescribed for longer than one year without another physical examination being performed Conditions influenced by fluid retention such as asthma, epilepsy, migraine, and cardiac or renal dysfunction, require careful observation Certain patients may develop manifestations of excessive estrogenic stimulation, such as abnormal or excessive uterine bleeding mastodynia, etc Prolonged administration of unopposed estrogen therapy has been reported to increase the risk of endometrial hyperplasia in some patients. Oral contraceptives appear to be associated with an increased incidence of mental depression. Patients with a history of depression should be carefully observed Preexisting uterine leiomyomata may increase in size during estrogen use The pathologist should be advised of estrogen therapy when relevant specimens are submitted If jaundice develops in any patient receiving estrogen, the medication should be discontinued while the cause is investigated Estrogens should be used with care in patients with impaired liver function, renal insufficiency, metabolic bone diseases associated with hypercalcemia, or in young patients in whom bone growth is not complete If concomitant progestin therapy is used, potential risks may include adverse effects on carbohydrate and lipid metabolism

The following changes may be expected with larger doses of estrogen

a Increased sulfobromophthalein retention

b Increased prothrombin and factors VII, VIII, IX, and X; decreased antithrombin 3, increased norepinephrine-induced platelet aggregability.

c. Increased thyroid binding globulin (TBG) leading to increased circulating total thyroid hormone, as measured by PBI, T4 by column, or T4 by radioimmunoassay Free T3 resin uptake is decreased, reflecting the elevated TBG; free T4 concentration is unaltered

d Impaired glucose tolerance

e Decreased pregnanediol excretion

f. Reduced response to metyrapone test

g Reduced serum folate concentration.

h. Increased serum triglyceride and phospholipid concentration As a general principle, the administration of any drug to nursing mothers should be done only when clearly necessary since many drugs are excreted in human milk

ADVERSE REACTIONS: The following have been reported with estrogenic therapy, including oral contraceptives breakthrough bleeding, spotting, change in menstrual flow; dysmenorrhea, premenstrual-like syndrome, amenorrhea during and after treatment; increase in size of uterine fibromyomata; vaginal candidiasis, change in cervical erosion and in degree of cervical secretion; cystitis-like syndrome; tenderness, enlargement, secretion (of breasts); nausea, vomiting, abdominal cramps, bloating; cholestatic jaundice; chloasma or melasma which may persist when drug is discontinued, erythema multiforme; erythema nodosum, hemorrhagic eruption; loss of scalp hair, hirsutism; steepening of corneal curvature; intolerance to contact lenses; headache, migraine, dizziness, mental depression, chorea; increase or decrease in weight; reduced carbohydrate tolerance; aggravation of porphyria; edema; changes in libido

ACUTE OVERDOSAGE: May cause nausea, and withdrawal bleeding may occur in females

DOSAGE AND ADMINISTRATION:

PREMARIN® Brand of conjugated estrogens tablets, USP

1. *Given cyclically for short-term* use *only.* For treatment of moderate to severe *vasomotor* symptoms, atrophic vaginitis, or kraurosis vulvae associated with the menopause (0.3 to 1.25 mg or more daily). The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible Administration should be cyclic (eg, three weeks on and one week off). Attempts to discontinue or taper medication should be made at three- to six-month intervals

2. *Given cyclically*: Female castration Osteoporosis. Female castration—1.25 mg daily, cyclically Adjust upward or downward according to response of the patient. For maintenance, adjust dosage to lowest level that will provide effective control Osteoporosis —0.625 mg daily. Administration should be cyclic (eg, three weeks on and one week off).

Patients with an intact uterus should be monitored for signs of endometrial cancer and appropriate measures taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

PREMARIN® Brand of conjugated estrogens Vaginal Cream

Given cyclically for short-term use *only* For treatment of atrophic vaginitis or kraurosis vulvae

The lowest dose that will control symptoms should be chosen and medication should be discontinued as promptly as possible

Administration should be cyclic (eg, three weeks on and one week off).

Attempts to discontinue or taper medication should be made at three-to-six month intervals

Usual dosage range: 2 to 4 g daily, intravaginally, depending on the severity of the condition

Treated patients with an intact uterus should be monitored closely for signs of endometrial cancer and appropriate diagnostic measures should be taken to rule out malignancy in the event of persistent or recurring abnormal vaginal bleeding

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1. Whitehead MI, Townsend PT, Pryse-Davies J, et al Effects of estrogens and progestins on the biochemistry and morphology of the postmenopausal endometrium *N Engl J Med* 1981;305 1599-1605 **2.** Paterson MEL, Wade-Evans T, Sturdee DW, et al: Endometrial disease after treatment with oestrogens and progestogens in the climacteric *Br Med J* 1980;280 822-824 **3.** Magos AL, Brincat M, Studd JWW, et al: Amenorrhea and endometrial atrophy with continuous oral estrogen and progestogen therapy in postmenopausal women *Obstet Gynecol* 1985, 67 496-499 **4.** Whitehead MI, Lane G, Siddle N, et al: Avoidance of endometrial hyperstimulation in estrogen-treated postmenopausal women *Semin Reprod Endocrinol* 1983,1 1,41-52 **5.** Barnes RB, Roy S, Lobo RA Comparison of lipid and androgen levels after conjugated estrogen or depo-medroxyprogesterone acetate treatment in postmenopausal women *Obstet Gynecol* 1985,66 216-219

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AMA News Notes

A bill that would repeal the federal health planning program effective Oct. 1 has been placed on "hold" by Sen. Lowell Weicker (R, Conn.). Also pending in the Senate is S 1855, the Quayle (Dan, R, Ind.) - Weicker planning bill that would reauthorize the program for three years and put it into a block grant with stringent rules for those states choosing to operate certificate-of-need (CON) programs.

In discussion with senators, the AMA has emphasized that the health planning program, with its objectionable CON provision, has not been authorized by Congress since FY 1982. Instead, it has been carried for nearly four years by each year's "continuing resolution."

Similar arguments are used with representatives against efforts to reauthorize the health planning program, such as that by HR 5413, co-sponsored by Rep. Jim Chapman (D, Texas) and 10 others from his state. Ironically, Texas abolished its statewide CON agency some years ago. In fact, nearly 20 states either have repealed CON laws already or plan to within the coming year.

* * *

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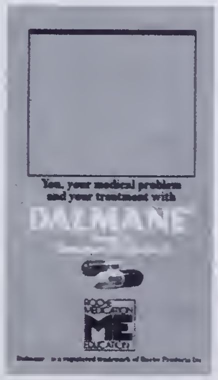
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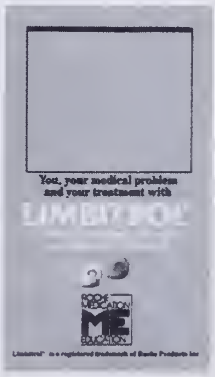
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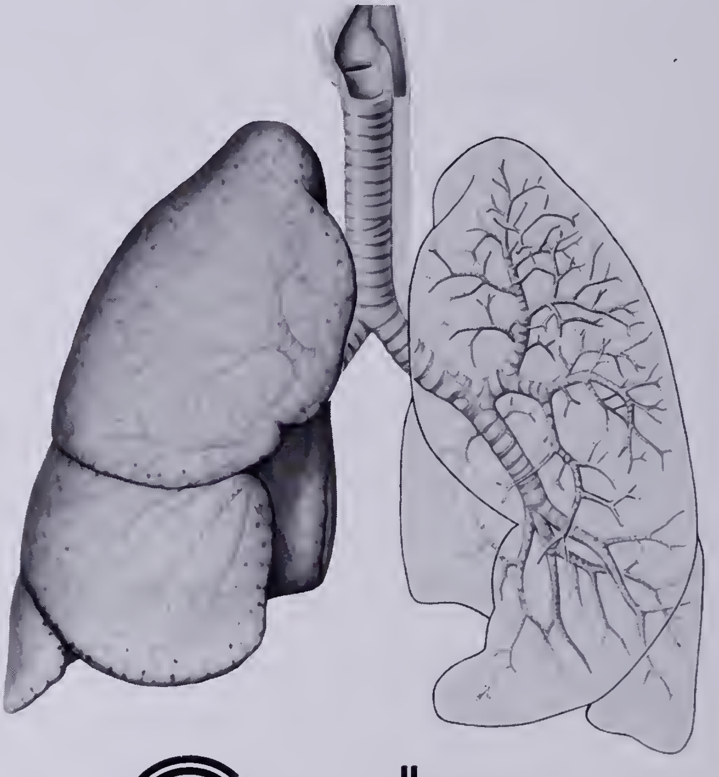

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H. influenzae, *H. influenzae,* *S. pneumoniae,* *S. pyogenes*
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Brief Summary Consult the package literature for prescribing information

Indications and Usage Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S pyogenes* (group A beta-homolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins), therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics Such colitis may range in severity from mild to life-threatening

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by C *difficile* Other causes of colitis should be ruled out

Precautions *General Precautions* – If an allergic reaction to Ceclor® (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e g , pressor amines, antihistamines, or corticosteroids

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms Careful observation of the patient is essential If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis

Usage in Pregnancy – Pregnancy Category B – Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor® (cefaclor, Lilly) There are, however, no adequate and well-controlled studies in pregnant women Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed

Nursing Mothers – Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses Average levels were 0 18, 0 20, 0 21, and 0 16 mcg/ml at two, three, four, and five hours respectively Trace amounts were detected at one hour The effect on nursing infants is not known Caution should be exercised when Ceclor is administered to a nursing woman

Usage in Children – Safety and effectiveness of this product for use in infants less than one month of age have not been established

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below

Gastrointestinal symptoms occur in about 2 5 percent of patients and include diarrhea (1 in 70)

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment Nausea and vomiting have been reported rarely

Hypersensitivity reactions have been reported in about 1 5 percent of patients and include morbilliform eruptions (1 in 100) Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor Such reactions have been reported more frequently in children than in adults Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy No serious sequelae have been reported Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients)

Causal Relationship Uncertain – Transitory abnormalities in clinical laboratory test results have been reported Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic – Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40)

Hematopoietic – Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal – Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200)

[061782R]

Note Ceclor® (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever See prescribing information

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Before prescribing, see complete prescribing information in SK&F CO. literature or *PDR*. The following is a brief summary.

* WARNING

This drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual. If this combination represents the dosage so determined, its use may be more convenient in patient management. Treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

Contraindications: Concomitant use with other potassium-sparing agents such as spironolactone or amiloride. Further use in anuria, progressive renal or hepatic dysfunction, hyperkalemia. Pre-existing elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in the severely ill, with urine volume less than one liter/day, the elderly and diabetics with suspected or confirmed renal insufficiency. Periodically, serum K^+ levels should be determined. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **Associated widened QRS complex or arrhythmia requires prompt additional therapy.** Thiazides cross the placental barrier and appear in cord blood. Use in pregnancy requires weighing anticipated benefits against possible hazards, including fetal or neonatal jaundice, thrombocytopenia, other adverse reactions seen in adults. Thiazides appear and triamterene may appear in breast milk. If their use is essential, the patient should stop nursing. Adequate information on use in children is not available. Sensitivity reactions may occur in patients with or without a history of allergy or bronchial asthma. Possible exacerbation or activation of systemic lupus erythematosus has been reported with thiazide diuretics.

Precautions: The bioavailability of the hydrochlorothiazide component of 'Dyazide' is about 50% of the bioavailability of the single entity. Theoretically, a patient transferred from the single entities of triamterene and hydrochlorothiazide may show an increase in blood pressure or fluid retention. Similarly, it is also possible that the lesser hydrochlorothiazide bioavailability could lead to increased serum potassium levels. However, extensive clinical experience with 'Dyazide' suggests that these conditions have not been commonly observed in clinical practice. Angiotensin-converting enzyme (ACE) inhibitors can elevate serum potassium; use with caution with 'Dyazide'. Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids, and during concurrent use with amphotericin B or corticosteroids or corticotropin [ACTH]). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics or those with suspected or confirmed renal insufficiency. Cumulative effects of the drug may develop in patients with impaired renal function. Thiazides should be used with caution in patients with impaired hepatic function. They can precipitate coma in patients with severe liver disease. Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving triamterene, and leukopenia, thrombocytopenia, agranulocytosis, and aplastic and hemolytic anemia have been reported with thiazides. Thiazides may cause manifestation of latent diabetes mellitus. The effects of oral anticoagulants may be decreased when used concurrently with hydrochlorothiazide; dosage adjustments may be necessary. Clinically insignificant reductions in arterial responsiveness to norepinephrine have been reported. Thiazides have also been shown to increase the paralyzing effect of nondepolarizing muscle relaxants such as tubocurarine. Triamterene is a weak folic acid antagonist. Do periodic blood studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. Triamterene has been found in renal stones in association with the other usual calculus components. Therefore, 'Dyazide' should be used with caution in patients with histories of stone formation. A few occurrences of acute renal failure have been reported in patients on 'Dyazide' when treated with indomethacin. Therefore, caution is advised in administering nonsteroidal anti-inflammatory agents with 'Dyazide'. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine. Hypokalemia is uncommon with 'Dyazide', but should it develop, corrective measures should be taken such as potassium supplementation or increased dietary intake of potassium-rich foods. Corrective measures should be instituted cautiously and serum potassium levels determined. Discontinue corrective measures and 'Dyazide' should laboratory values reveal elevated serum potassium. Chloride deficit may occur as well as dilutional hyponatremia. Concurrent use with chlorpropamide may increase the risk of severe hyponatremia. Serum PBI levels may decrease without signs of thyroid disturbance. Calcium excretion is decreased by thiazides. 'Dyazide' should be withdrawn before conducting tests for parathyroid function. Thiazides may add to or potentiate the action of other antihypertensive drugs. Diuretics reduce renal clearance of lithium and increase the risk of lithium toxicity

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances; postural hypotension (may be aggravated by alcohol, barbiturates, or narcotics). Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and respiratory distress including pneumonitis and pulmonary edema, transient blurred vision, sialadenitis, and vertigo have occurred with thiazides alone. Triamterene has been found in renal stones in association with other usual calculus components. Rare incidents of acute interstitial nephritis have been reported. Impotence has been reported in a few patients on 'Dyazide', although a causal relationship has not been established.

Supplied: **'Dyazide' is supplied as a red and white capsule, in bottles of 1000 capsules; Single Unit Packages (unit-dose) of 100 (intended for institutional use only); in Patient-Pak™ unit-of-use bottles of 100.**

BRS-DZ.L42

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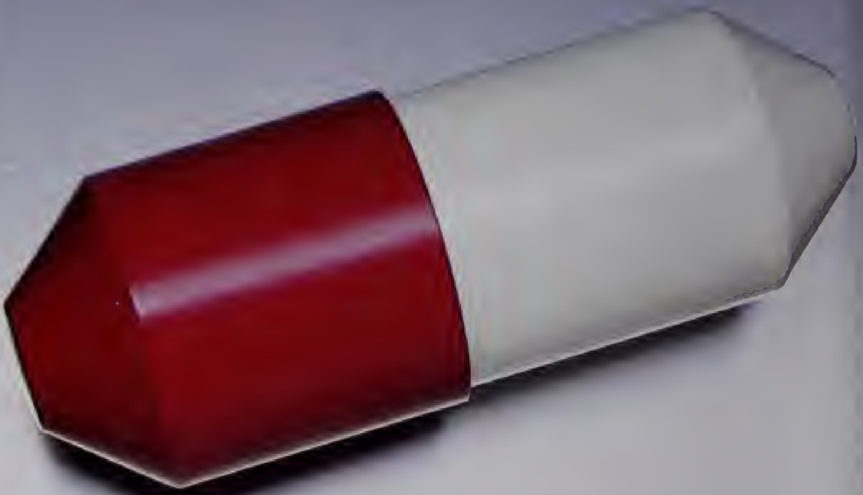

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The Nebraska Medical Journal

DECEMBER 1986 VOL. 71, NO. 12

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5505 Ellendale Road,
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Address all correspondence relating to subscriptions, advertising or address changes to Mr. Ken Neff, Business Manager, 1512 FirsTier Bank Building, Lincoln, Nebraska 68508. Phone (402) 474-4472.

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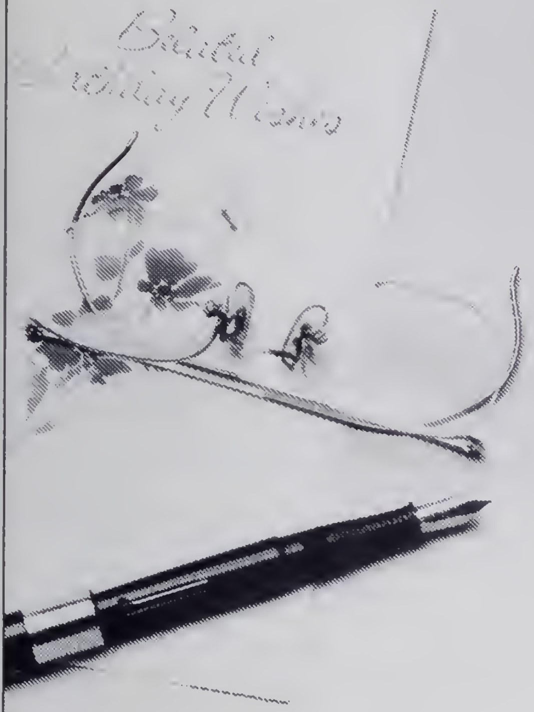

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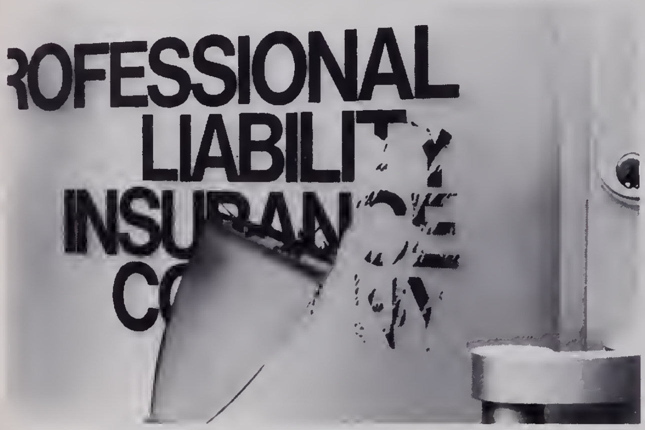

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AMA News Notes

Dr. Sammons also joined continuing efforts of lobbyists and federation key contacts in calling for an absolute end to the unreauthorized, dwindling funded health planning act of 1974.

"The health planning program's failures have been demonstrated repeatedly," Dr. Sammons said in a letter sent to all members of the Senate. While the act was intended to control health care costs, "some studies suggest that the certificate of need (CON) process actually results in increased health care facility costs through procedural delays, extensive paperwork, and costly appeals of CON decisions," he added.

In a letter sent to all Senate budget reconciliation conferees, AMA Executive Vice President James H. Sammons, M.D., urged that the freeze on physician Medicare charges be allowed to expire. Effective on July 1, 1984, the freeze was supposed to expire on Oct. 1, 1985, but has been extended three times by Congress, and now is scheduled to end on Dec. 31, 1986.

"It is time to end the fee freeze," Dr. Sammons said, pointing out that while less than 28% of physicians have signed participation agreements, more than 70% of Medicare claims are accepted on an assignment basis, more than 78% of physicians who have not signed agreements nonetheless take assignment on Medicare claims, and HCFA data indicated that expensive services as even more likely to be accepted on assignment than routine low-cost services.

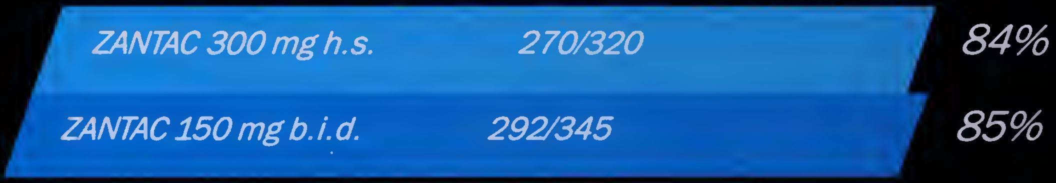
"Physicians who agreed to accept assignment on all Medicare claims were promised incentives that never materialized," he said. "Physicians who chose not to join the program have faced an unfair prevailing fee freeze for over two years," he added. Without congressional action, the freeze will expire naturally on Dec. 31. Dr. Sammons urged Senate conferees to let that happen.

CONTROL
ACID RAIN
with once-a-night
h.s. therapy for active
duodenal ulcers

Only one tablet at bedtime

Controls nocturnal acid to relieve pain and heal duodenal ulcers

Heals active duodenal ulcers after 4 weeks in most patients*[*1]



In well-controlled, double-blind, multicenter trials, ZANTAC 300 mg h.s. healed active duodenal ulcers in 84% of patients after 4 weeks. After 8 weeks, healing rates may be higher with ZANTAC 150 mg b.i.d. (92%) than with ZANTAC 300 mg h.s. (87%).

Relieves pain and other symptoms as effectively as ZANTAC 150 mg b.i.d.[1]

Zantac® 300

ranitidine HCl/Glaxo 300 mg tablets

Once-daily dosing may enhance compliance in patients for whom dosing convenience is important

Side-effects profile comparable to ZANTAC 150 mg b.i.d.[1-3]

Headache—sometimes severe—has been reported. Rare effects on the CNS, cardiovascular, GI, hepatic, and integumental systems have been observed, as well as rare cases of hypersensitivity reactions. See ADVERSE REACTIONS section of Brief Summary of Product Information before prescribing.

No significant interference with the hepatic cytochrome P-450 enzyme system at recommended doses

ZANTAC 300 mg h.s. had no significant drug interactions with theophylline or warfarin. The bioavailability of certain medications whose absorption is dependent on a low gastric pH may be altered when ZANTAC or other medications which decrease gastric acidity are administered.

Glaxo / ROCHE

See next page for references and Brief Summary of Product Information.

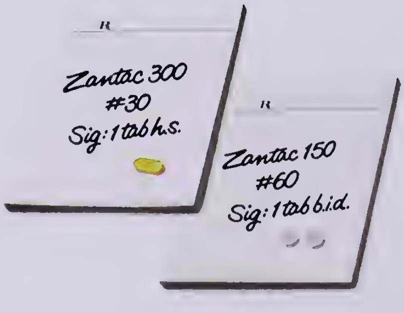
*It is not known exactly how much acid inhibition is needed to heal ulcers.

IN ACTIVE DUODENAL ULCERS

Once-a-night h.s. therapy controls acid rain

Zantac 300
ranitidine HCl/Glaxo 300 mg tablets

Two effective regimens to treat active duodenal ulcers:



References: 1. Data available on request, Glaxo Inc. **2.** Ireland A, Cofin-Jones DG, Gear P, et al: Ranitidine 150 mg twice daily vs 300 mg nightly in treatment of duodenal ulcers. *Lancet* 1984;2.274-275. **3.** Colin-Jones DG, Ireland A, Gear P, et al Reducing overnight secretion of acid to heal duodenal ulcers. *Am J Med* 1984; 77 (suppl 5B):116-122

ZANTAC® 150 Tablets
(ranitidine hydrochloride)
ZANTAC® 300 Tablets
(ranitidine hydrochloride)

BRIEF SUMMARY OF PRODUCT INFORMATION

See complete product information before prescribing. The following is a brief summary.

INDICATIONS AND USAGE: ZANTAC® is indicated in:
1. Short-term treatment of **active duodenal ulcer**. Most patients heal within four weeks.
2. **Maintenance therapy** for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of **pathological hypersecretory conditions** (eg, Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of **active, benign gastric ulcer** Most patients heal within six weeks and the usefulness of further treatment has not been demonstrated.
5. Treatment of **gastroesophageal reflux disease (GERD)**. Symptomatic relief commonly occurs within one or two weeks after starting therapy. Therapy for longer than six weeks has not been studied.

In active duodenal ulcer; active, benign gastric ulcer; hypersecretory states; and GERD, concomitant antacids should be given as needed for relief of pain.

CONTRAINDICATIONS: ZANTAC® is contraindicated for patients known to have hypersensitivity to the drug.

PRECAUTIONS: General: 1. Symptomatic response to ZANTAC® therapy does not preclude the presence of gastric malignancy 2. Since ZANTAC is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since ZANTAC is metabolized in the liver.

Laboratory Tests: False-positive tests for urine protein with Multistix® may occur during ZANTAC therapy, and therefore testing with sulfosalicylic acid is recommended.

Drug Interactions: Although ZANTAC has been reported to bind weakly to cytochrome P-450 in vitro, recommended doses of the drug do not inhibit the action of the cytochrome P-450-linked oxygenase enzymes in the liver. However, there have been isolated reports of drug interactions which suggest that ZANTAC may affect the bioavailability of certain drugs by some mechanism as yet unidentified (eg, a pH-dependent effect on absorption or a change in volume of distribution).

Carcinogenesis, Mutagenesis, Impairment of Fertility: There was no indication of tumorigenic or carcinogenic effects in lifespan studies in mice and rats at doses up to 2,000 mg/kg/day

Ranitidine was not mutagenic in standard bacterial tests *(Salmonella, E coli)* for mutagenicity at concentrations up to the maximum recommended for these assays.

In a dominant lethal assay, a single oral dose of 1,000 mg/kg to male rats was without effect on the outcome of two matings per week for the next nine weeks.

Pregnancy: ***Teratogenic Effects: Pregnancy Category B:*** Reproduction studies have been performed in rats and rabbits at doses up to 160 times the human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ZANTAC. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers: ZANTAC is secreted in human milk Caution should be exercised when ZANTAC is administered to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established

Use in Elderly Patients: Ulcer healing rates in elderly patients (65 to 82 years of age) were no different from those in younger age groups The incidence rates for adverse events and laboratory abnormalities were also not different from those seen in other age groups.

ADVERSE REACTIONS: The following have been reported as even in clinical trials or in the routine management of patients treate with oral ZANTAC® The relationship to ZANTAC therapy has bee unclear in many cases. Headache, sometimes severe, seems to b related to ZANTAC administration.

Central Nervous System: Rarely, malaise, dizziness, somnolenc insomnia, and vertigo. Rare cases of reversible mental confusior agitation, depression, and hallucinations have been reported, pr dominantly in severely ill elderly patients.

Cardiovascular: Rare reports of tachycardia, bradycardia, and pr mature ventricular beats.

Gastrointestinal: Constipation, diarrhea, nausea/vomiting, an abdominal discomfort/pain.

Hepatic: In normal volunteers, SGPT values were increased to least twice the pretreatment levels in 6 of 12 subjects receivin 100 mg qid IV for seven days, and in 4 of 24 subjects receivin 50 mg qid IV for five days. With oral administration there hav been occasional reports of reversible hepatitis, hepatocellular hepatocanalicular or mixed, with or without jaundice.

Musculoskeletal: Rare reports of arthralgias.

Hematologic: Rare reports of reversible leukopenia, granuloc topenia, thrombocytopenia, and pancytopenia

Endocrine: Controlled studies in animals and man have shown stimulation of any pituitary hormone by ZANTAC and no antiandr genic activity, and cimetidine-induced gynecomastia and imp tence in hypersecretory patients have resolved when ZANTAC ha been substituted. However, occasional cases of gynecomasti impotence, and loss of libido have been reported in male patient receiving ZANTAC, but the incidence did not differ from that in th general population.

Integumental: Rash, including rare cases suggestive of mild er thema multiforme, and, rarely, alopecia.

Other: Rare cases of hypersensitivity reactions (eg, bronchospas fever, rash, eosinophilia) and small increases in serum creatinin

DOSAGE AND ADMINISTRATION: Active Duodenal Ulcer: The curre recommended adult oral dosage is 150 mg twice daily. An alte nate dosage of 300 mg once daily at bedtime can be used f patients in whom dosing convenience is important. The adva tages of one treatment regimen compared to the other in a partic lar patient population have yet to be demonstrated.

Maintenance Therapy: The current recommended adult oral dosag is 150 mg at bedtime

Pathological Hypersecretory Conditions (such as Zollinger-Elliso Syndrome): The current recommended adult oral dosage is 150 m twice a day. In some patients it may be necessary to administ ZANTAC® 150-mg doses more frequently Doses should be adjuste to individual patient needs, and should continue as long as clin cally indicated. Doses up to 6 g/day have been employed patients with severe disease.

Benign Gastric Ulcer: The current recommended adult oral dosag is 150 mg twice a day

GERD: The current recommended adult oral dosage is 150 m twice a day

See full prescribing information for dosage adjustment f patients with impaired renal function.

HOW SUPPLIED: ZANTAC® 300 Tablets (ranitidine hydrochlori equivalent to 300 mg of ranitidine) are yellow, capsule shape tablets embossed with "ZANTAC 300" on one side and "Glaxo" o the other. They are available in bottles of 30 (NDC 0173-0393 4 and unit dose packs of 100 tablets (NDC 0173-0393 47)

ZANTAC® 150 Tablets (ranitidine hydrochloride equivalent 150 mg of ranitidine) are white tablets embossed with "ZANTA 150" on one side and "Glaxo" on the other. They are available bottles of 60 tablets (NDC 0173-0344-42) and unit dose packs 100 tablets (NDC 0173-0344 47).

Store between 15° and 30°C (59° and 86°F) in a dry place. Prote from light. Replace cap securely after each opening.

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THE NEBRASKA MEDICAL JOURNAL

Safety Belts - One Year Later

DR. DALE KEMMERER
Chairman, Nebraska Traffic Safety Now Coalition

THE Nebraska Unicameral passed the first safety belt law on May, 30, 1985. It was faithfully supported by 26 Senators and signed by Governor Bob Kerrey. It became effective on September 6, 1985.

It is possible that there was not a majority of Nebraskans supporting the law at that time. However, cumulative evidence demonstrates increasing statewide support:

- — Newspaper poll of November 1985 notes 51% approval of the law.
- — January 1986 telephone poll of 751 Nebraskans reveals 61% approval of the law.
- — June 1986 telephone poll of 500 Nebraskans shows 67% approval of the law.
- — Nebraska Seat Belt Coalition grew from 30 individuals and groups into Nebraska Traffic Safety Now coalition of over 5,000.

Usage has increased dramatically from 10-15% prelaw rate!

- — Nebraska highway survey observes 38% use.
- — Interstate 80 observation over Memorial Day found over 60% use.
- — January 1986 telephone poll lists the following use rates:
  34% always use the belts
  27% most of the time use belts.
  18% sometimes use belts.
  79%

The name has changed from "seat belt" (which is something you put your seat on) to "safety belt", a highly sophisticated and reliable device incorporating both a lap belt and a shoulder harness, which could save your life.

Media reporting has changed dramatically. Although reporters' styles vary, the reported use or non-use of safety belts in a crash is now commonplace. It was rarely reported one year ago.

The law was ruled constitutional by Lancaster County Court Judge Donald E. Endacott who said that the opponents may find it inconvenient to buckle up, but that does not deprive them of any rights. Furthermore, it certainly is within the powers of the State of Nebraska to require safe conduct on the highways through statutory regulations.

People believe that:

- — The law saves lives (79% in June poll).
- — The law should be strictly enforced (67% in June poll.)
- — Wearing a safety belt and having an accident are not private matters. Eighty-five percent respondents agree or strongly agree that everyone is effected by insurance and medical costs associated with traffic crashes (June poll).

Has it made a difference with injuries? Absolutely yes. A 8.3% reduction has been shown in the first six months of 1986 with both the number of accidents and the number of miles traveled increasing dramatically. There were 655 fewer injuries. More significantly, the severest injuries have been reduced.

Has it made a difference in the highway deaths? No statistical significance is noted in the death rate. The number of persons killed to date in the front seats of cars in 1985 was 83. The number in 1986 is 100. However, these are not comparable years since the gas prices have been markedly reduced and the number of miles traveled has markedly increased. Furthermore, 1985 was the lowest mortality rate on Nebraska highways in the last four decades. However, there is no reason to believe that Nebraska statistics will not follow the decline seen in other states and other nations when seat belt use becomes commonplace.

Finally, I would like to add a personal note. It has become my pleasant professional experience to personally witness week after week persons who have been wearing their safety belt only because it is the law and who have escaped serious injury when they were involved in crashes. Unfortunately, the reverse is still true that many persons suffer injury or death needlessly because they have not buckled up. When safety belt usage approaches the 100% goal, I am confident our mortality statistics will mirror the experience of every other jurisdiction that has a mandatory safety belt law.

A Miracle or Two

EDWARD A. HOLYOKE, JR.

THE following story appeared in the Journal of the American Medical Association. It was entitled "Do You Believe in Miracles?"[1] and told of a young man, a poor family, and a giant wild turkey. The message of this story seems most appropriate for the holiday season.

The story concerns Mr. Bogar, a farmer who lived with his wife on a small farm in the foothills of Missouri. It was Christmas Eve, 1925, and a new snow covered the ground. It was very cold and the air was still. It was too cold to cut fence posts, split cordwood, or hew crossties for the new railroad, so Mr. Bogar decided to go hunting for Foots. Foots was an enormous wild turkey that shunned the company of his kind. Many a hunter had come upon his gigantic tracks, few had seen him, and none had come close enough to shoot him. Mr. Bogar had not gone far before he saw turkey tracks so big they had to belong to Foots, and he was determined to hunt him down. He was well up the mountain before he spotted Foots who had paused, looking for acorns and periodically stretching his neck to see if danger was near. By going slowly and staying behind trees, Mr. Bogar came to within 60 yards of Foots. He could put a bullet anywhere he wanted from 60 yards and Foots fell in his tracks, looking perfectly dead. His head was lolled on a rock and one eye was staring blankly at the sky. Just as Mr. Bogar reached toward Foots, he thought he saw one leg twitch. Suddenly there was a great commotion and Foots filled the sky! He soared out over the valley like a giant prehistoric bird, and that was the last Mr. Bogar ever saw of Foots.

In a valley below the mountains lived a man, his wife, and their several small children. They had a few scrub cattle and a small farm. The man had a coat that had been patched so many times it was hard to tell what the original color was. He and his wife had to work very hard just to keep the children clothed and fed.

The following summer this farmer happened to meet Mr. Bogar and asked, "Do you believe in miracles?" "Yes I do," replied Mr. Bogar. The man told Mr. Bogar how he and his wife had decided they would have to have hominy corn and huckleberries for dinner the previous Christmas. It was Christmas Eve, and he was riding the old mare down to feed the cattle when an enormous turkey crashed dead to earth right in front of them. The man had not prayed for a turkey for Christmas, but he wasn't sure if his wife had or not.

Mr. Bogar never told the man with the coat of many colors about Foots, and the man died without ever knowing exactly how and why Foots fell from the heavens that Christmas Eve day.

The Christmas season is a time of miracles. The Christmas story itself is probably the greatest miracle of all. Long ago the prophet

Isaiah wrote, "The people walking in darkness have seen a great light; on those living in the land of the shadow of death a light has dawned. For to us a child is born, to us a son is given, and the government will be on his shoulders. And he will be called Wonderful Counselor, Mighty God, Everlasting Father, Prince of Peace. Of the increase of his government and peace there will be no end. He will reign on David's throne and over his kingdom, establishing and upholding it with justice and righteousness from that time on and forever." (Isaiah 9:2, 6-7)[2]

Some centuries later, a certain physician wrote, "In the sixth month God sent the angel Gabriel to a virgin pledged to be married to a man named Joseph, a descendant of David. The virgin's name was Mary. The angel went to her and said, 'Greeting, you are highly favored! The Lord is with you.' Mary was greatly troubled at his words and wondered what kind of greeting this might be. But the angel said to her, 'Do not be afraid, Mary. You have found favor with God. You will be with child and give birth to a son, and you are to give him the name Jesus. He will be great and will be called the Son of the Most High. The Lord God will give him the throne of his father David, and he will reign over the house of Jacob forever; his kingdom will never end.' " (Luke 1:26-33)[2]

The doctor continues: "Joseph went up from the town of Nazareth in Galilee to Bethlehem the town of David, because he belonged to the house and line of David. He went there to register with Mary, who was pledged to be married to him and was expecting a child. While they were there, the time came for the baby to be born. And she gave birth to her firstborn, a son. She wrapped him in clothes and placed him in a manger, because there was no room for them in the inn." (Luke 2:4-7)[2]

A miracle? I think so! I would have liked to have known Doctor Luke; I bet he was a fine caring physician - the kind we all strive to be in even these uncertain times. May this story and its message of hope and peace for everyone be in our hearts this Christmas season.

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ORIGINAL ARTICLES

Predicting Response to Tamoxifen in Metastatic Breast Cancer

JAMES L. CONNOR, M.D.
JOHN F. FOLEY, M.D., Ph.D.*
HENRY M. LEMON, M.D.
Department of Internal Medicine Section of Oncology/Hematology, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105

THE anti-estrogen agent, Tamoxifen, has been increasingly utilized in breast cancer therapy since it was noted to achieve a substantial objective regression rate in this disease,[1,2,3,4,5,6] while producing low frequencies of side effects compared with other treatments.[3,4,7] A number of studies have used estrogen receptor (ER) status to predict the outcome of Tamoxifen therapy.[1,3,4,5,6,8,9] Unfortunately, ER assays have a high false positive rate as only approximately 49% of patients show a therapeutic response to Tamoxifen.[6] Our study had two aims: (1) to add to the pool of data relating ER status to the outcome of Tamoxifen therapy;[1,3,4,5,6,8,9] and (2) to determine whether the ER+ nonresponders could be predicted by clinical criteria obtained early in the course of therapy. Thus, we evaluated whether the regression of soft tissue metastases and the occurrence of side effects could reliably predict the later outcome of Tamoxifen therapy.

Materials and Methods:

The study evaluated 53 breast cancer patients from a total of 60 patients receiving Tamoxifen therapy in the University of Nebraska Medical Center Oncology Clinic between March 1978 and November 1980. Seven patients were not evaluated, two because of administration of cytotoxic drugs simultaneously with Tamoxifen, three because of inadequate x-ray, bone scans or other records preventing an assessment of treatment outcome, and two because of inadequate followup. All patients received 10-20 mg/day of Tamoxifen for as long as clinical evaluations indicated a regression or stabilization of disease. While the exact dosage administered (10 vs. 20 mg.) varied across patients, the dose distributions were equivalent across the ER+, ER− and NER (no ER assessment) groups. Of the 53 patients, 14 had been oophorectomized prior to Tamoxifen therapy, two had been oophorectomized and hypophysectomized, and 31 had received prior cytotoxic chemotherapy. The patients' ages ranged from 30 to 82 with a mean of 61.8 years. The time from original diagnosis to Tamoxifen therapy ranged from one month to 240 months with a mean of 77.8 months. Fifty patients were postmenopausal and three were premenopausal. The design of the study was a historical cohort with retrospective surveying of patients, clinical records, x-ray files, bone scans, ultasounds, liver scans, and CAT scans used to assess the therapeutic outcome of Tamoxifen administration. The three cohorts of patients were defined in terms of the prognostic basis for administering Tamoxifen therapy: (1) the NER (non-ER assessed) cohort was determined to be eligible for Tamoxifen therapy by being without advanced visceral metastases and either being at least 12 months postmenopausal (28), or by being premenopausal but having had a prior favorable therapeutic response to oophorectomy (3); (2) ER+ (14) and (3) ER− (8) cohorts were eligible for Tamoxifen therapy by virtue of the absence of advanced visceral metastases. Receptor determination had been done on the primary cancer in 4 cases and on later recurrent metastases in 4 cases. (4).

ER bioassays were performed at the University of Nebraska Medical Center Pathology Laboratory according to procedures described by Thompson and Haven.[7] A specimen was considered estrogen receptor positive when its binding capacity was $\geq$10 femtomoles of receptor per mg. of cytosol protein. Progesterone receptor assays were not available at this time.

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*Reprint Requests: John F. Foley, M.D., Ph.D., Department of Internal Medicine, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105.

Patient outcomes were classified into four categories: (A) complete regression represented a 100% elimination of tumor at all soft tissue (lymph nodes, skin, susbcutaneous nodules), visceral and bony sites where metastases had occurred; (B) a partial regression was a 50% or greater reduction in the volume of at least 50% of all measurable tumors with no progression of other lesions; (C) a stabilization was the failure of any measurable tumor to increase in size; (D) a progression indicated either the size of the tumor increased or other clinical evidence appeared of a worsened condition within three months of Tamoxifen administration. Outcomes A, B and C constituted the "responsive" groups of patients. In order to be classified as being in any of the three responsive categories (A, B or C), the patient also had to maintain the stabilization or remission in tumor size for at least three months and had to show some other confirming evidence of clinical improvement, such as, a decrease in liver enzyme levels. The physiologic effect of tamoxifen is defined as the occurrence of hot flushes or uterine bleeding.

Results:

In general, an ER+ result offers a slight advantage over predicting a favorable Tamoxifen outcome versus no ER assessment, while an ER− result strongly predicts an unfavorable outcome. Table 1 reveals that 88% of the ER+ group showed some response to Tamoxifen versus 66% of the N.E.R. group. It further reveals that only 12% of the ER− group showed any evidence of response to Tamoxifen.

As Table 2 indicates, ER status was more likely to generate false positve predictions (ER+ patients falsely predicted to be responsive) than false negative predictions (ER− patients falsely predicted to be nonresponsive); thus Table 2, row three, shows that the specificity of the ER test is lower than its sensitivity. Hence, we attempted to uncover additional clinical variables which might be used to lower the frequency of ER+ patients who are falsely predicted to be responsive to Tamoxifen therapy.

As Table 2 indicates, progression in a soft tissue metastasis within the first 3 months of therapy very accurately predicted the eventual outcome at other metastatic sites, with an overall error rate (12%) comparable to ER assay results (14%). Soft tissue progression predicted progression at other sites, but only if soft tissue change occurred early within the first 3 months of therapy.

Table 3 indicates that early progression of soft tissue tumor size predicts an acceleration in the rate at which metastases develop at distant sites. For example, patients who have soft tissue tumors increasing in size early —

TABLE 1

EFFECT OF ESTROGEN RECEPTOR STATUS UPON OUTCOME OF TAMOXIFEN THERAPY

	Category % (No.)			
Response	ER-	NER	ER+	All
Complete	0 (0)	10 (3)	0	6 (3)
Partial	0 (0)	13 (4)	43 (6)	18 (10)
Stable	12 (1)	43 (13)	43 (6)	38 (20)
None	88** (7)	34 (11)	14* (2)	38 (20)
No. Cases	8	31	14	53

ER- - Estrogen receptor negative tumor
NER - No estrogen receptor data
ER+ - Estrogen receptor positive tumor

* $p<.05$, + = 1.8, 43 df, comparing percent of clinically responsives for ER+ group vs. NER (one tailed T tests).

** $p<0.001$, ± 3.45, 37 df, comparing percent of responders for ER- group vs. NER (rate of responsives = 100% - rate of progression).

during the first three months of tamoxifen therapy — develop pleural metastases 9.1 months sooner than control patients without soft tissue metastases (row 1, column 1 of Table 3). However, patients who have soft tissue tumors increasing in size later — after the first three months of tamoxifen therapy — fail to develop pleural metastases significantly earlier than controls (row 1, column 2 of Table 3). The rest of Table 3 shows that early progression of soft tissue tumors predicts an acceleration in the rate of development of metastases in bone and lung sites as well as pleura.

The greatest disadvantage of early soft tissue changes as a prognosticator was that it was evaluable in only 49% (26/53) of the patients.

We tested a "clinically corrected" ER+ protocol in which predicted Tamoxifen non-responders would be either ER− patients or

TABLE 2

TREATMENT CLINICAL CRITERIA, ER ASSAY RESULTS, AND CLINICALLY CORRECTED ER RESULTS AS PROGNOSTICATORS OF TAMOXIFEN THERAPY OUTCOME

Prognosticator	Sensitivity (SE) (n)	Specificity (SE) (n)	Overall error rate	Percent of cases evaluated
Tamoxifen* side effects	90%	61%	30%	100% (53/53)
Early soft tissue progression	100%	75%	12%	49% (26/53)
ER assay	92%	78%	14%	41% (22/53)
Clinically corrected ER protocol	93%	88%	9%	41% (22/53)

* Tamoxifen side effects were scored as "present" if any of the following occurred during treatment: hot flushes, and or uterine bleeding. Only if none of these were present was a case scored as "absent".

TABLE 3

PREDICTION OF GENERALIZED REACTIVATION OF METASTATIC BREAST CANCER BY SOFT TISSUE RESPONSE

Metastatic Site	Soft Tissue Progression Compared to Controls Early	 Late
1. Pleura	9.1 months**	6.2 months
2. Bone	9.5 months***	0.4 months
3. Lung	5.0 months*	0.9 months

NOTE: Table entries score acceleration in the rate of development of distant metastases. Acceleration is scored as the mean months until metastases appear in controls without soft tissue tumors minus months until metastases appear in patients with soft tissue tumors. For example, Row 1, Column 1 = 9.1 (10.8 controls - 1.7 early progressors).

* p<.025, t = 2.61, df = 28, (Tukey, 1949).
** p<.01, t = 3.75, df = 20
*** p<.001, t = 6.42, df = 41

1 & 2 Early minus soft tissue progression occurring within 3 months of starting tamoxifen and late after 3 months.

ER+ patients with early soft tissue progression. We found that such a protocol would reduce the frequency of "false positive" predicted nonresponders without an increase in false negatives. Table 2, bottom row, shows that such a protocol would have an overall error rate of only 9% and a specificity of 88% which was improved over the specificity of the "uncorrected" ER assay of 78%.

Patients who experienced physiologic side effects with Tamoxifen therapy were more likely to be clinically responsive than were patients with no side effects (Table 2), row one. However, the overall error rate was too high (30%) to be of much use in developing a corrected ER protocol.

Discussion:

Our results agree with those of previous Tamoxifen studies in that ER status is more likely to generate false positive predictions than false negatives.[1,3,4,5,6,7,8,9] Since the total number of patients assessed by our studies is small, we have summarized data of Tamoxifen response predicted by ER receptor in Table 4. While there is potential difficulty in generalizing across different studies, the studies of Table 4 are consistent in showing that ER− responders are infrequent — approximately 12% overall. Other workers have suggested that further progress in reducing the frequency of false negatives may be made by avoiding warming of specimens and obtaining specimens of adequate size.[10] However, the frequency of false positive ER+ nonresponders is still quite high — approximately 36% of all ER+ patients (Table 4).

Another approach to the problem has been suggested by Hull and associates who have pointed out that if one adds progesterone receptor + to ER+, the response rate rises from 60 to 80%, reducing the false positive results by approximately one-half.

The present study suggests one method of reducing the therapeutic impact of ER+ nonresponders; namely to terminate Tamoxifen and change therapies upon evidence of progression of soft tissue metastases within the first three months of Tamoxifen therapy. Our data indicate that early progression in a soft tissue site is very likely to be followed within a few months with progression at visceral or bone sites. We examined retrospectively a protocol which would stop Tamoxifen for patients being either ER− or ER+ with early soft tissue progression. We found that this "corrected" ER protocol had a lower overall error rate and a reduced frequency of patients falsely predicted to eventually be responsive to Tamoxifen therapy. However, our data base was small and our conclusions retrospective, and we recommend a clinical trial on a larger number of subjects to test the hypotheses that the best prognosticator of Tamoxifen outcome is a combination of both ER data and data on soft tissue progression during treatment.

TABLE 4

RESPONSE TO TAMOXIFEN AS PREDICTED BY
ESTROGEN RECEPTOR STATUS

	Responders (CR + PR + Stable) Total	
Study	ER+	ER−
Bloom	23/48	2/18
Connor, Foley, Lemon	12/14	1/8
Fabian[1]	4/6	0/5
Kiang[2]	6/10	0/12
Levner[4]	9/13	0/4
Manni[9]	6/11	0/4
Moseson[5]	15/16	3/9
Mouridsen[6]	7/11	2/9
TOTAL	82/129 (64%)	8/69 (12%)

Summary:

This study judged the effect of tamoxifen on 53 patients with metastatic breast cancer. Estrogen receptor (ER) status predicted responders with a 92% sensitivity, 78% specificity and 14% error rate. Early remission of soft tissue metastases predicted responses of bone and visceral metastases with only a 12% error rate. The occurrence of physiologic side effects to the tamoxifen could identify responders but had an unacceptably high error rate of 30%. The best overall predictor of a favorable response employed the variables of ER assay results and soft tissue regression data. These variables furnished a sensitivity of 93%, a specificity of 88%, and an error rate of 9%.

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Smokeless Tobacco: Questions of Clinical Significance

GARY F. MOORE, M.D.
DANIEL LYDIATT, M.D.
JAMES MASSEY, M.D.
ANTHONY J. YONKERS, M.D., F.A.C.S.
University of Nebraska Medical Center
Department of Otolaryngology and
Maxillofacial Surgery and the
Department of Oral and Maxillofacial Surgery
42nd Street and Dewey Avenue
Omaha, Nebraska 68105

MUCH recent controversy and media attention has surrounded the potentially harmful effects of smokeless tobacco. There has been a great increase in the number of people using chewing tobacco, both as a substitute for cigarettes and as a means of appetite suppression. Peer pressure also plays an important role in its use. Questions that need to be addressed are the effects of young people using smokeless tobacco on subsequent oral cancer rates and the addictive potential and qualities of nicotine in a smokeless tobacco form.

The Nebraska State Legislature recently attempted to prohibit the free distribution of tobacco products, put a tax on smokeless tobacco and label smokeless tobacco products as being potentially carcinogenic and harmful to your health. Although this attempt failed, Federal legislation has since been passed that provides for warning labels on all smokeless tobacco products.

History

Snuff was introduced to France from Brazil in the 1500's by Jean Nicot[1] who also lent his name to the active ingredient contained in the plant. The stimulant effect of nicotine obtained by inhalation through the nose led to wide spread addiction of the drug in Europe. Snuffing became quite popular in England in the 1600's when it was thought to provide a protective quality to the user from the plague.[2] The placement of snuff or chewing tobacco in the gingival buccal fold is largely an American tradition, which has experienced a recent resurgence in the last 10 years due to the promotional efforts of the tobacco industry and the social acceptance of the "urban cowboy" syndrome. Sales of smokeless tobacco have increased more than 10 percent each year since 1974.[3] Currently, it is estimated that 22 million Americans use smokeless tobacco on a daily routine with a progressively younger population comprising a rising proportion of habitual users.[3] Unburned tobacco exists in a variety of cuts, flavors and textures. These include: 1) snuff (extremely fine ground tobacco leaf), 2) leaf, 3) plug (compressed form of processed tobacco, and 4) various coursely ground forms. ·(Figure 1)

Clinical Studies

The prolonged use of smokeless tobacco placed in the gingival buccal sulcus causes tissue changes which have been termed snuff dippers lesions or snuff dippers keratosis. Both of these lesions clinically are called leukoplakia which simply means "white patch." (Figure 2) Leukoplakia pathologically represents a thickening of the keratin layer of the mucosa in response to chronic irritation. (Figure 3) Leukoplakia is seen in a high number of patients after prolonged use of chewing tobacco. Studies have indicated that with continued use of smokeless tobacco, approximately 16% of these leukoplakic lesions will present as either dysplasia or carcinoma in situ.[4] An additional 13% will be invasive carcinoma. (Figure 4) It is estimated that at least 10% of patients with leukoplakia have invasive carcinoma or will develop carcinoma in their lesions.[4] Predicting which leukoplakic lesions will indeed progress to squamous cell carcinoma is impossible; therefore, all leukoplakic lesions should be considered premalignant.

Treatment

When a patient presents clinically with

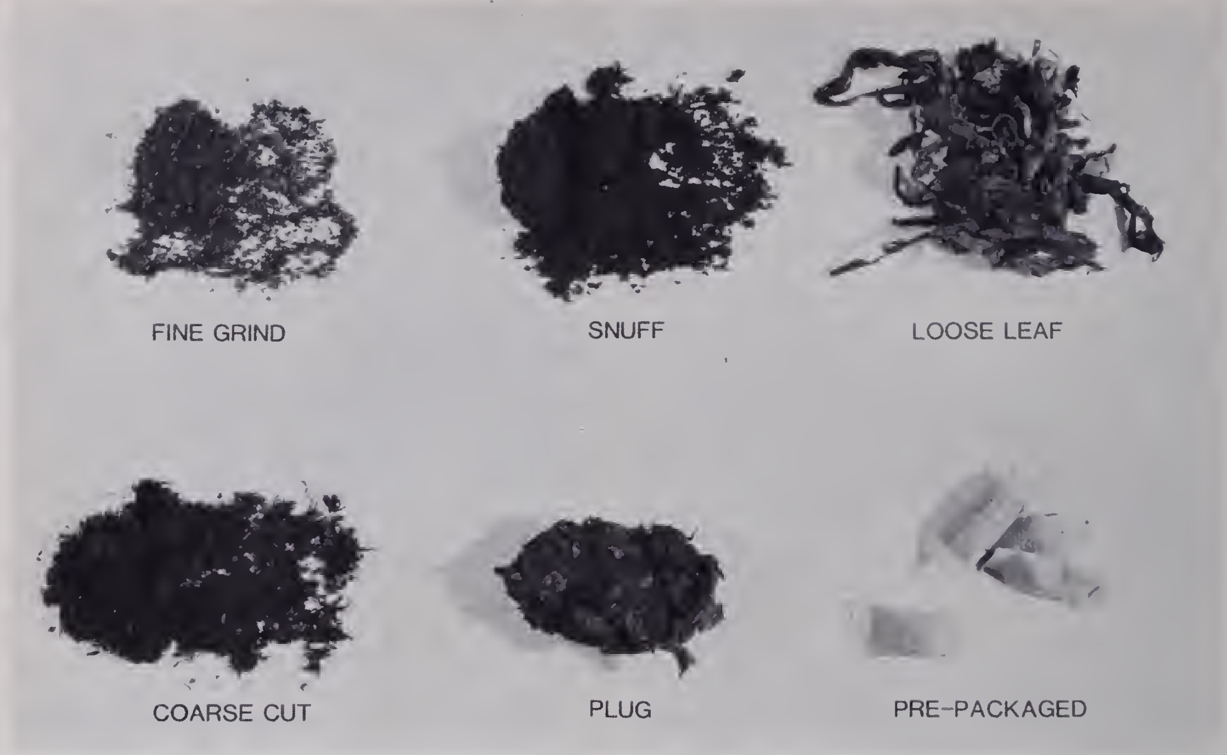

Figure 1
Some of the multiple forms of oral tobacco available commercially.

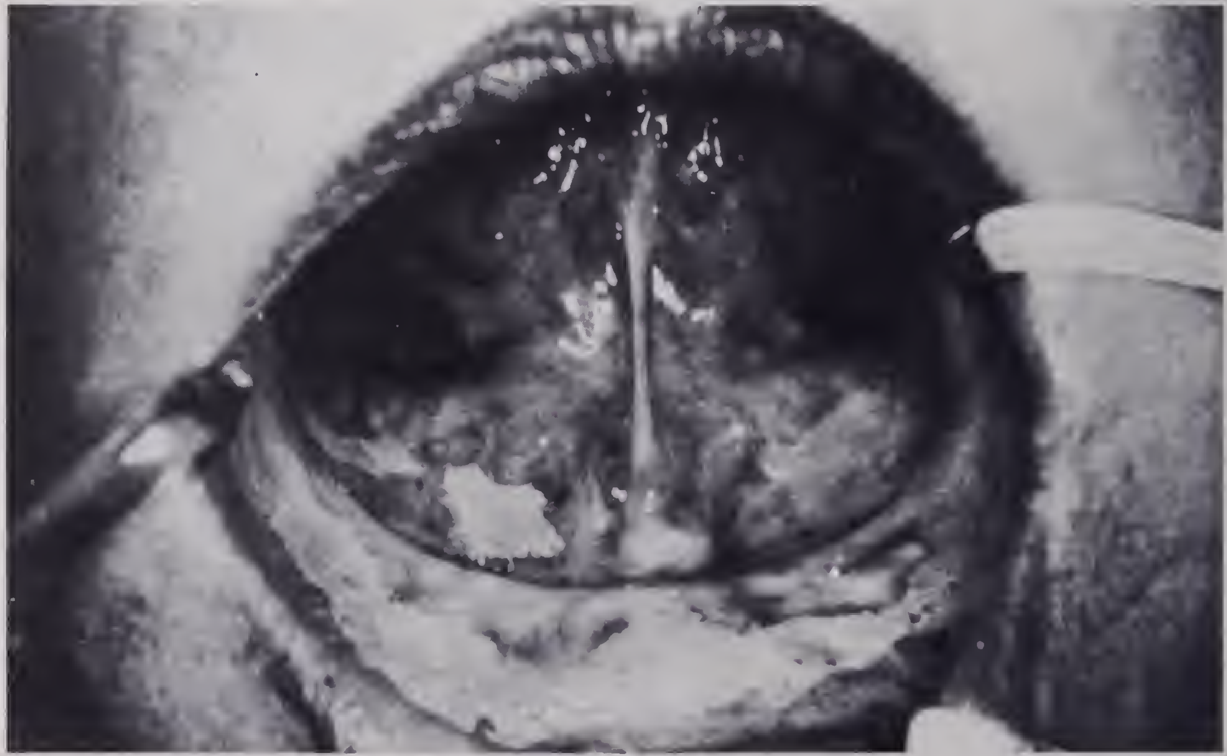

Figure 2
Leukoplakia from patient with snuff dippers lesion. Note the classic anatomical location in the gingivobuccal fold and floor of the mouth where patient normally packs his chew.

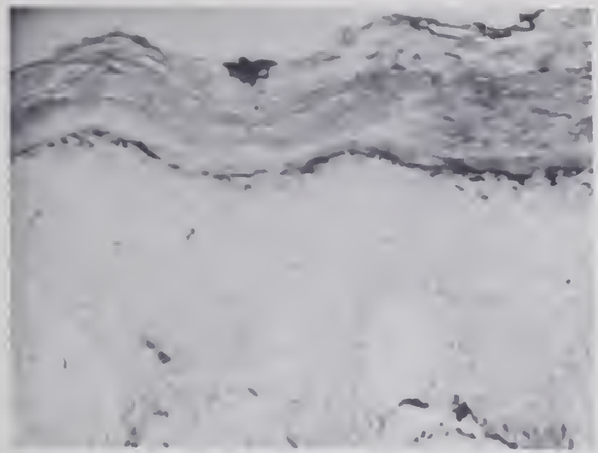

Figure 3A
Increased thickness of epithelium in snuff dippers keratosis on microscopic exam.

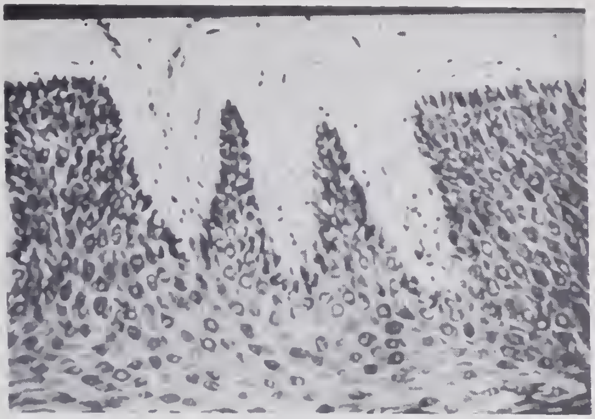

Figure 3B
Hyperplasia of rete pegs in biopsy specimen from a patient with snuff dippers lesion.

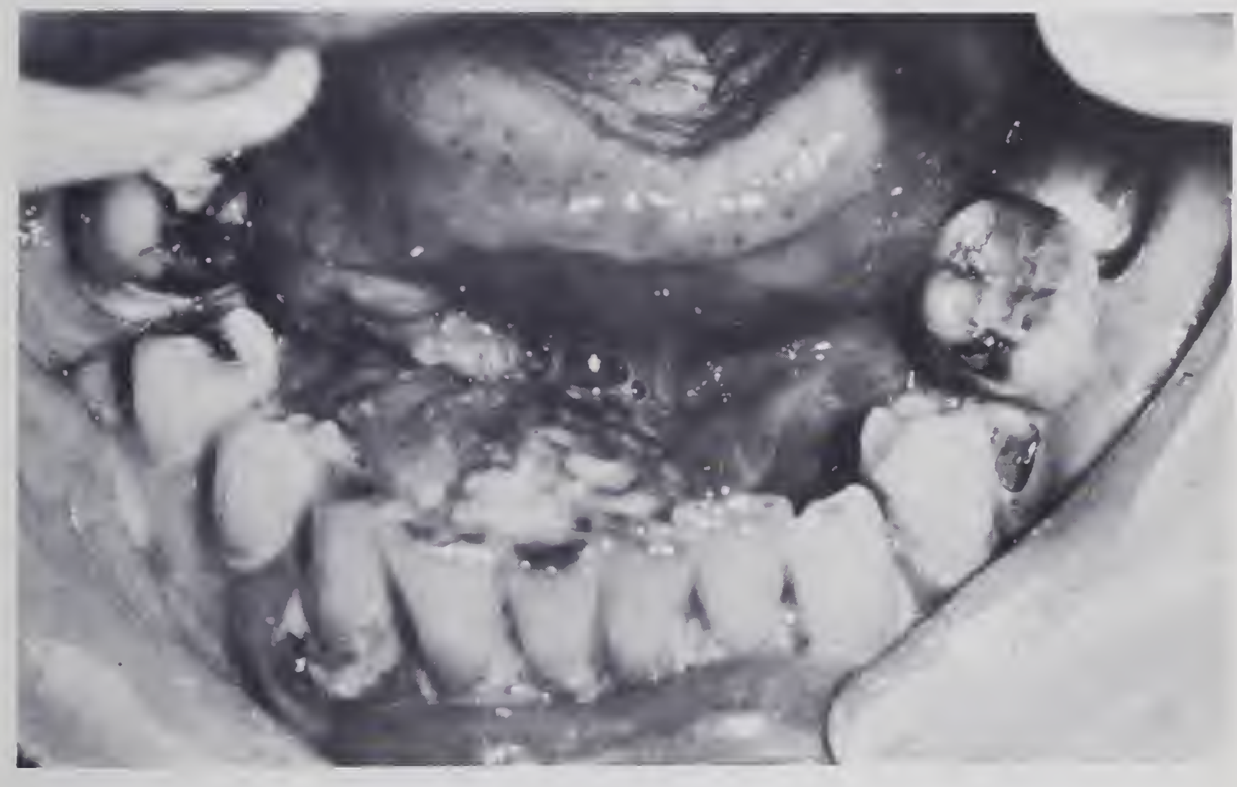

Figure 4
Invasive squamous cell carcinoma of floor of mouth in long term chewing tobacco user.

nonulcerated leukoplakia and a habit of using smoked or smokeless tobacco, our approach is to simply attempt to get the patient to stop the habit. However, if the lesion is erythroplakic, ulcerated, or the patient refuses to stop chewing, a biopsy is obtained initially. Those patients that chew tobacco are seen in approximmately two months for follow-up evaluation and, at that time, are re-evaluated as to their tobacco habits. If the patient has stopped and the lesion has disappeared, they are asked to return in six months for a follow-up examination. If the patient has stopped chewing and the lesion has remained, a biopsy is obtained. If the biopsy results are normal, they will be placed on a six month re-evaluation protocol and emplored to stop their tobacco habit. If moderate to severe dysplasia is noted in the biopsy specimen, the entire leukoplakic area is removed with laser treatment to destroy all dysplastic tissue. Verrucous cancer is a subtype of squamous cell cancer often associated with unburned tobacco use. This tumor doesn't metastasize, but may change into infiltrative squamous cell cancer. The treatment is wide local excision since radiation therapy has been reported to cause the growth to become a higher grade lesion.[5] If carcinoma in situ or invasive squamous cell carcinoma is noted, treatment is undertaken according to standard oncological principles, usually via tumor resection or combined surgery/radiation therapy.

Addiction

Much controversy has arisen regarding the addictive potential of smokeless tobacco and as to whether it is a safe substitute for cigarette smoking. The National Institute of Drug Abuse and World Health Organization have set forth in their criteria for potential dependence-producing drugs the following criteria: 1) the drug is psychoactive, 2) the drug produces euphoria, and 3) the drug is a biologic reinforcer.[6] Dr. Jack Henningfield of the National Institute of Drug Abuse (NIDA) has reported that history and science leave no doubt that tobacco in a variety of forms can be an addictive drug, and nicotine derived by tobacco is a dependence producing drug and a prototypic drug of abuse. Although the NIDA concluded that smoking is the most widespread form of drug dependence in the nation, Dr. Henningfield also stated that "any form of nicotine should be considered to have the potential to produce dependence until proven otherwise." The concentration of nicotine in moist snuff is between 6.9 mg/gm and 14.4 mg/gm[7] and peak levels of nicotine absorbed within five minutes of use match those of cigarette smoking.[8] More significantly, the blood levels during use of nicotine are indeed similar between snuff and cigarette smoking.[9] Respiratory and oral mucosa readily absorb both forms of nicotine, producing approximately the same levels of drug in the blood stream.

The American Psychiatric Associations' Diagnostic and Statistical Manual of Mental Disorders states that an individual is considered tobacco dependent if he has used the drug for one month with either: 1) unsuccessful attempts to stop or significantly reduce the amount of tobacco used on a permanent basis, 2) the development of withdrawal symptoms when the tobacco is stopped, or 3) the presence of a serious physical disorder that the individual knows is exacerbated by tobacco use.[10] Certainly, any physician or dentist who has attempted to get a patient to stop the use of smokeless tobacco has met with unsatisfying levels of success. He has also repeatedly heard patients describing the cravings and autonomic nervous system responses which follow tobacco cessation in the habitual user. Certainly, those of us who have treated patients with squamous cell carcinomas of the head and neck that continue to use tobacco can attest to the fact that many patients will indeed satisfy any or all of these criteria for tobacco dependence.

The root of administration of nicotine seems less important than the levels achieved in producing dependence. Although smokeless tobacco appears safer than cigarettes, this dependence may be as difficult to stop as that seen with cigarette smoking. Nicotine is a prototypic drug of abuse which has been shown to produce dependence; therefore, snuff should be considered potentially addictive.

Conclusion

A major concern is the recent upswing in the number of youth using smokeless tobacco. With the recent popularity in the use of smokeless tobacco in high school and even junior high students, the fear of developing tobacco dependence at this much earlier age is indeed realistic. Whether a higher percentage of these patients with the potential for many years of prolonged use of smokeless tobacco will progress to squamous cell carcinoma is unknown. The evidence implicating smokeless tobacco as a factor in the development of squamous cell carcinoma at this point seems irrefutable. The risks of all forms of tobacco use causing tobaccoism and the potential problems associated with this addiction are so grave that parents and children of school age must be educated as to the potentially lethal consequences of smokeless tobacco.

What can the physician do about this problem? It seems unwise to recommend smokeless tobacco as a substitute for cigarette smoking. Certainly numerous alternatives exist to cigarette smoking that are healthier and more effective. Secondly, younger patients need to be asked about their smokeless tobacco habits. The addictive potential and other harmful effects of tobacco should be emphasized to them. Lastly, the physician should assume an active role in educating the public about the effects of smokeless tobacco, and should support any health related legislation concerning tobacco use restrictions.

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Observations on Hematology in China

RICHARD B. DAVIS, M.D., Ph.D.
Professor of Medicine and Pathology, Section of Oncology/Hematology, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska 68105

IT has been noted that one of the joys of traveling is "the opportunity to gain new insights into a civilization or culture one has long known only through books or films."[1] In April 1976, as one member of a team of 27 physicians and scientists, I visited the People's Republic of China, to participate in the First Joint Chinese American Hematology Conference, sponsored by the Chinese Medical Association in Beijing. The group was composed primarily of American scientists, but two were from France, one was Canadian, and there was one Australian, Doctor Ian Cooper, Head of Hematology/Oncology at the Cancer Institute of Melbourne. In addition to the formal conference in Beijing, two conferences were held in other Chinese cities, plus we visited hospitals, laboratory facilities, and spoke at length with Chinese hematologists. This brief report will review the status of hematology in China, and indicate certain differences between the practice of hematology in China and the United States.[2]

Thirty-five papers were presented at the conference in Beijing, with 18 being presented by the Chinese and 17 by the group from America. The presentations by the Chinese included two papers on bone marrow transplantation (a total of 29 allogeneic transplants from two centers), the use of harringtonine in the management of acute non-lymphocytic leukemia, the use of indigocarmine in the treatment of chronic granulocytic leukemia, a survey of hemoglobinopathies in China, and studies of platelet functional abnormalities in Chinese. The conference was attended by about 250 physicians, some of whom had traveled for as long as 75 hours by train to attend the conference. Travel by air on the Chinese Airline (CAAC) is not readily available, and since many Chinese physicians only earn $30.00 a month, air travel may be prohibitively expensive. It was of interest to me that the conference schedule and format in Beijing and other cities in China was not known until our arrival. Then the schedule was decided on by mutual negotiation and depended largely upon topics of special interest to the Chinese. After the Beijing conference the hematology group traveled to Hangzhou and then to Suzhou. In Hangzhou 9 papers were presented by the American group. Two cases were also presented for discussion at the No. 1 hospital of Zhejiang Medical University. One case was of chronic neutrophilic leukemia, and one of a myelodysplastic syndrome. In Suzhou, a city which is over 2,500 years old, two concurrent lecture sessions were held, and 9 papers were presented. The Chinese presentations included papers on the differentiation of human leukemic cells, chromosome changes in acute non-lymphoctyic leukemia, and studies on platelet membrane glycoproteins. The glycoprotein work was done at the Thrombosis and Hemostasis Research Unit of Suzhou Medical College. Five of us spent one morning at the unit, which has very good facilities. The unit is directed by Dr. Chang-Geng Ruan, a capable young man who trained in Paris with Dr. Jacques Caen. Ten physicians divided into sections of biochemistry, pharmacology, and cell culture techniques work in the unit. A separate section of clinical hematology is included, and is located at the nearby hospital. The group is actively studying the effect of herbs and snake venoms on platelet activation, and has prepared three different monoclonal antibodies against platelet glycoproteins llb/lla to study platelet function.

By Western standards Chinese hospitals are spartan, and the patients may stay in four or eight bed open wards. However, laminar flow facilities are used for marrow transplantation.

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*Reprint Requests: Richard B. Davis, M.D., Ph.D., Section of Oncology/Hematology, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska 68105.

There are three active centers for bone marrow transplantation in China. Lu Dao-Pi reported at the Beijing conference that seven of his eight patients who had transplants for acute granulocytic leukemia were in remission for more than eighteen months after transplantation. The Chinese are using a preparation of gamma globulin derived from human placentas, which inhibits lymphocyte growth in culture, to prevent graft versus host disease. Methotrexate also is used. Acute granulocytic leukemia generally is treated with a combination of harringtonine,[3, 4] cyclophosphamide, cytosine arabinoside, and prednisone (HOAP) A complete remission rate of 70% was claimed for that treatment, but the age distribution of patients was not clear. After initial remission a three month period of "intensification therapy" is employed, using daunomycin, cytosine arabinoside, and prednisone, or further HOAP therapy. Thereafter, 6-mercaptopurine and low dose subcutaneous cytosine arabinoside are given for four days every week for an indefinite period of time. The long term results of that treatment have yet to be evaluated.

Acute non-lymphocytic leukemia is said to comprise 40% of acute leukemias in children in China, whereas it is a comparative rarity in children in the United States. Chronic lymphocytic leukemia is rare in China, although the prevalence of multiple myeloma apparently is equivalent to that in the United States.

The Chinese have a great interest in the acute leukemias and in aplastic anemia, which is said to account for a large number of hospital admissions. The diagnosis of marrow hypoplasia generally is made on aspriates without the benefit of marrow biopsy. Aplastic anemia is a common problem because of widespread industrial benzene exposure, the common use of chloramphenicol, and almost certainly because of hepatitis, with an estimated 200 million carriers of hepatitis in China. We were told that the recovery rate after benzene exposure was negligible, but that greater than a 50% recovery rate occurred after aplasia secondary to other causes.

The treatment of aplastic anemia involved: 1) herbal mixtures, 2) herbal mixtures with added powdered deer horn, or turtle shell, or more interestingly 3) infusions of fetal liver. Fetal liver has been given to 31 patients with severe aplastic anemia with a 60-75% long term remission rate. The infusions are followed by increased peripheral blood counts, and have been given on successive occasions in some patients along with immunosuppressive agents. Anti-thymocyte globulin has not been used widely, and controlled studies of the effectiveness of fetal liver infusion for aplastic anemia have not been done.

In addition to the formal lecture series and the visit to the Thrombosis and Hemostasis Research Unit at Suzhou University, the group visited the Xiyuan hospital in Beijing where traditional Chinese medicine is practiced, and the No. 1 Hospital of Zhejiang Medical University in Hangzhou. Automated equipment for blood counting was not used in those hospitals, with blood counts being done by hand. Only ABO blood typing is done, since almost all Chinese are Rh positive. Pheresis equipment was available in Hangzhou, but apparently was not frequently used. If transfusions or cryoprecipitate are necessary and the patient is employed in a factory, then the patient's co-workers are expected to volunteer en masse for needed blood products. Medical costs for government and factory workers are entirely subsidized by the government. Insurance for rural workers is available at nominal cost (2-3 yuan, 60-90 cents) per year and clinic visits cost between 3 cents and 10 cents. The average length of hospital stay was said to be 2-3 months, and we saw one patient with an apparent immune thrombocytopenia hospitalized for 3 months of steroid therapy.

Nutritional iron deficiency is not an uncommon cause for anemia among women, and we were told that hemolytic anemia frequently was Coombs positive. Nonetheless, it is apparent that beta (but not alpha) thalassemia, glucose-6-phosphate dehydrogenase deficiency, hereditary spherocytosis, hemoglobin E and H disease are not unusual. Hemophilia now is managed with cryoprecipitate in China, and not with lyophilized concentrates. As far as we could learn, AIDS has not appeared in China, and hemophiliacs tested for HTLV III antibody have uniformly been negative, with the exception of a few who had received concentrates obtained from the U.S. There is an interest in organizing centers for hemophilia care, and the hemostasis unit in Hangzhou cares for 95 hemophiliacs (28% IX deficient, 72% VIII deficient) and 45 patients with von Willebrand's disease.

The Chinese Journal of Hematology is published monthly in Tianjin. The March 1986 issue of the Journal had a wide variety of clinical studies and reviews, including papers on coagulation findings in epidemic hemorrhagic fever, hemophiliac pseudotumors, 89 cases of anaphylactoid purpura with nephritis, an analysis of 48 cases of G-6-PD deficiency, and coagulation changes in liver homographs. Of 20 papers in that issue, 14 were related to problems of hemostasis.

The health care system in China operates under severe economic restraints.[5] That fact and a continuing commitment to traditional Chinese medicine will affect the rate at which "Western" medicine will be practiced in China, and may be in sharp contrast to the ferment for change in many other aspects of Chinese life.[6, 7] Nonetheless, the Chinese hematologists whom we met were very conversant with current literature, although current journals are not widely available, and were most engaging and courteous hosts. They are particularly interested in problems of hematologic neoplasia, and appeared determined to support some clinical centers where "state of the art" hematology will be done. China also seems to have a genuine commitment of support for their research institutes, and some such as the Shanghai Institute for Biochemistry are outstanding.[8]

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Von Recklinghausen's Neurofibromatosis and Primary Hyperparathyroidism: A Case Report and Literature Review

LEIGH B. HOPPE, Ph.D.*
Medical Student, University of Nebraska College of Medicine.
PAUL E. COLLICOTT, M.D.
Clinical Instructor in Surgery, University of Nebraska College of Medicine
TIMOTHY J. STIVRINS, M.D.
Clinical Assistant Professor of Internal Medicine, University of Nebraska College of Medicine

SINCE Friedrich Daniel von Recklinghausen first reported in 1882 on the cutaneous disease that bears his name, there have been many other conditions associated with neurofibromatosis.[1] In unrelated work nine years later he described cystic changes within bone before the existence of parathyroid glands was suspected.[2] The generalized condition of osteitis fibrosa cystica, which has since been attributed to primary hyperparathyroidism, was first known as Recklinghausen's Disease of Bone. The first report of Von Recklinghausen's neurofibromatosis and primary hyperparathyroidism found in the same individual was not recorded until 1953.[3] Since that time there have been reported only nine cases of these two diseases coexisting in the literature.[4-9] We report the tenth case in which a woman with neurofibromatosis was found to have hypercalcemia during a work-up for headaches and an acute attack of left ocular pain.

Case Report

A 71 year old white female with a 53 year history of Von Recklinghausen's disease presented with sudden onset of severe left eye pain and dull, aching bifrontal headaches. The headaches had persisted for 3-4 months and were only slightly relieved by aspirin. She had no other complaints. Glaucoma was ruled out as the cause of her eye pain.

On physical examination the thyroid gland was normal to palpation and there were no abnormalities other than numerous neurofibromas confined to the patient's thorax. Multiple pendulous skin tags ranging in size from a few millimeters to several centimeters were found on the patient's chest, abdomen, and back. One large skin lesion measuring 10 cm in diameter was located over the patient's right breast. The condition of neurofibromatosis was confirmed by biopsy of one of the lesions.

Serum calcium levels were found to be above 13 mg/dl (N=8.4-10.4). In addition, urinary calcium was 491 mg/24 hr (N=100-250), alkaline phosphatase was 139 U/ml (N=20-95), and serum parathyroid hormone was 190 uLEq/ml (N=0-50). Blood urea nitrogen, serum creatinine, and creatinine clearance were all found to be within normal limits.

Roentgenographic studies of the hands, clavicles, and pelvis showed no evidence of the brown lesions characteristic of hyperparathyroidism, nor was there any subperiosteal resorption of the bones of the hands. The patient's chest radiograph was found to be within normal limits and a head computed axial tomographic study with enhancement was considered to be normal. Multiple benign calcifications suggesting chronicity of the abnormal calcium metabolic state were found to be present in the patient's right ovary, left breast, pancreas, and uterus.

Following recognition of the hypercalcemia, non-surgical treatment was begun with I.V. saline and furosemide, and secondarily with Calcitonin intramuscularly in an attempt to lower serum calcium levels. This was without effect as subsequent measurements of serum calcium remained above normal and ranged between 11.3-13.9 mg/dl.

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*Reprint Requests: Leigh B. Hoppe, Ph.D., 2340 Sheridan Boulevard, Lincoln, NE 68502.

With high probability it was felt that the elevated serum calcium was due to a parathyroid adenoma. The normal kidney function ruled out secondary hyperparathyroidism. Surgery was advised.

A standard surgical approach to the parathyroid glands was initiated. A large abnormal superior parathyroid gland was located on the right side. This gland was removed and the adenoma was confirmed by frozen section. The inferior thyroid artery was followed throughout it's course to locate other abnormal parathyroid glands but none were subsequently found.

The block of tissue examined confirmed the surgical and clinical impression of parathyroid adenoma. The excised adenoma was 3-4 times the size of a normal gland. Prior to the adenoma removal, serum calcium was 12.9 mg/dl. Seven hours after surgery this level had dropped to 10.3 mg/dl. Ten hours later the calcium level was measured at 8.8 mg/dl and it continued to fall to 8.1 mg/dl twenty-three hours postoperatively. Two 500 mg doses of intravenous calcium gluconate were given, but serum calcium continued to fall. By 50 hours after surgery it was 6.8 mg/dl. On the third post-op day the patient was released from the hospital on an oral dose of 500 mg of calcium gluconate three times a day. A follow up serum calcium level of 9.4 mg/dl was obtained one month after discharge. At this time she was taken off her calcium supplement and ten days later her serum calcium appeared to be stabilized at 9.4 mg/dl. She reported that her headaches ended shortly after the removal of her adenoma. She is presently asymptomatic two months after surgery.

Discussion

Von Recklinghausen's neurofibromatosis is inherited as an autosomal dominant trait and is identified by the appearance of pigmented skin lesions, axillary freckles, and multiple cutaneous neurofibromas which occur most commonly over the trunk. In addition to cutaneous manifestations, fibroblast replacement of normal bone leading to dysplastic changes occurs in patients with neurofibromatosis. Several skeletal abnormalities have been associated with neurofibromatosis and include scoliosis, kyphosis, scalloping of vertebral bodies, long bone erosion, cysts, hypertrophy, and hypoplasia.[10] On display at the London Hospital is the skeleton of Joseph Merrick, perhaps the most famous sufferer of neurofibromatosis. His deformities vividly demonstrate the dramatic changes bones can undergo in this condition.

Bony changes also occur in primary hyperparathyroidism when the normal feedback control by serum calcium is lost and there is autonomous production of parathyroid hormone. It was once thought to be a rare disease but the incidence is estimated to be from 1 in 200 to 1 in 700 people.[11] The occurence of disease increases with age and is especially common in post menopausal women. Hypercalcemia coupled with increased levels of parathyroid hormone is diagnostic of primary hyperparathyroidism. According to recent statistics 83.1% of symptomatic cases of hyperparathyroidism are due to a parathyroid adenoma, 16.1% result from parathyroid hyperplasia, and 0.8% are normal.[12]

It has been suggested that the appearance of these two rare conditions in one individual is not coincidental but may be genetically linked.[6] Although the tumors of neurofibromatosis are of neuroectodermal orgin and the adenomas of primary hyperparathyroidism are of endodermal origin, it is possible for tumors of such varied origin to be associated. The multiple endocrine neoplasia syndromes are an interesting group of tumors that link tumors of dissimilar tissue origin. Mucocutaneous neuromas and tumors derived from pituitary, thyroid, parathyroid, adrenal cortex and medulla, and pancreas have been found in various combinations. Chakrabarti has proposed that the simultaneous occurence of neurofibromas and parathyroid adenomas is a variant of the multiple endocrine neoplastic syndromes.[8]

Early assessment of hypercalcemia can prevent progression of disease. Surgical intervention is the only definitive treatment for primary hyperparathyroidism and can correct the abnormalities in calcium excretion, reverse the process of bone demineralization, prevent deterioration of renal function, and decrease the appearance of neuromuscular symptoms. Surgical failure is attributed to insufficient exploration of the neck or unrecognized multiple gland involvement. On the other hand, an overly zealous dissection can potentially lead to permanent hypoparathyroidism. The condition of transient hypoparathyroidism is a post surgical complication that has not been eliminated but it can be diminished by leaving at least one parathyroid gland intact.[13]

The disease process of neurofibromatosis can involve skeletal changes but there is little information in the literature relating changes in bone to increased serum calcium levels. Our patient was discovered to have hypercalcemia without signs or symptoms of bone disease. It is of interest to note that the two conditons present in this case were first recognized and bore the name of their discoverer, F.D. von Recklinghausen. With the use of automated laboratory equipment, it is apparent that cases of hypercalcemia will be detected in individuals who may or may not have symptoms of the condition. It is not unlikely that there will be increasing case reports of neurofibromatosis coupled with primary hyperparathyroidism.

Summary

A patient with coexisting parathyroid adenoma and neurofibromatosis is described. The appearance of these two pathologies in one person is considered to be rare, but with the inclusion of this case there are now ten reported cases. When presented with a patient who has neurofibromatosis, it would be appropriate to evaluate the patient for hypercalcemia. Even if there are no symptoms that suggest an abnormality of calcium homeostasis, evaluation of serum calcium in these patients could detect the existence of primary hyperparathyroidism before organ damage occurs.

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FRACTURE OF THE MONTH

"Wrist Sprain" Due to an Unrecognized Hamate Fracture

JOHN F. CONNOLLY, M.D.
ROY GUSE, M.D.
From the Combined Orthopaedic Services, University of Nebraska Medical Center and Creighton University, Omaha Veterans Administration Hospital, 42nd & Dewey Avenue, Omaha, NE 68105

GENERATIONS of students and house officers have been warned to be wary of confusing fractures of the scaphoid as wrist sprains. However, a number of other carpal bones are subject to fracture, particularly from direct blows to the wrist. These include the triquetrum, capitate, and especially the hamate.[1, 2] These are likely to pass unrecognized and misdiagnosed unless the physician performs a careful physical and specific roentgenographic examination. Routine x-rays of wrist injuries are frequently misleading. Such radiographs may not lie, but they must be asked the proper questions to give us the truth. The following case report illustrates the problems involved.

Case Report

The patient was a 29 year old, right hand dominant physician who was involved in a motor vehicle accident injuring his wrist and neck. He described being thrown forward across the steering wheel, managing to hold on with his left hand. Subsequent to the accident he noticed a moderate amount of left hand and wrist pain. X-rays at the time of initial emergency room evaluation were interpreted as showing no fracture. The diagnosis was considered to be a "wrist sprain". Five weeks later he came to our clinic because of persistent pain on the ulnar half of the left wrist causing difficulty gripping surgical instruments. On our physical examination he had tenderness along the dorsal ulnar aspect of the wrist. Neurovascular as well as tendon function were normal. Repeat anterior-posterior and lateral roentgenograms of the wrist were also normal. (Figure 1A, B) However, because of persistent pain, a carpal tunnel view taken with several different angles finally revealed a fracture of the hamate process. (Figure 1C)

Discussion

About 2 percent of all carpal bone fractures involve the hamate.[3] However, because of the special roentgenographic views required to diagnose these injuries and the frequency with which the fractures pass unrecognized, the true incidence is unknown. The classic injury is a direct blow to the hypothenar eminence from the end of a baseball bat or golf club. This occurs when the golfer, baseball or tennis player takes an uncontrolled swing and allows the butt of the club or racquet to impact against the hamate.

The location of pain from these fractures is frequently misleading. Although the patient may have some point tenderness over the tip of the hamate, the usual site is in the dorsal ulnar aspect, due to the fracture occurring near the base of the process. The patient may have painless active motion in the fingers and wrist, but adduction and abduction of the little finger against resistance is painful. Also grasping any cylindrical object such as a club, racquet or surgical instrument causes pain. In a few patients swelling around the fracture site can cause ulnar nerve symptoms with sensory or motor deficit in the hand. Additionally, the profundus tendon to the fifth finger can rupture due to attrition as it passes across the fracture site.

The key to diagnosis is a high index of suspicion and utilization of appropriate x-ray technique to visualize the injured region. Carpal tunnel roentgenograms should be ordered for any "wrist sprain" after a direct blow to the palmar aspect of the wrist. The view is obtained with the pronated forearm on the film cassette and a 2 cm spacer placed between the

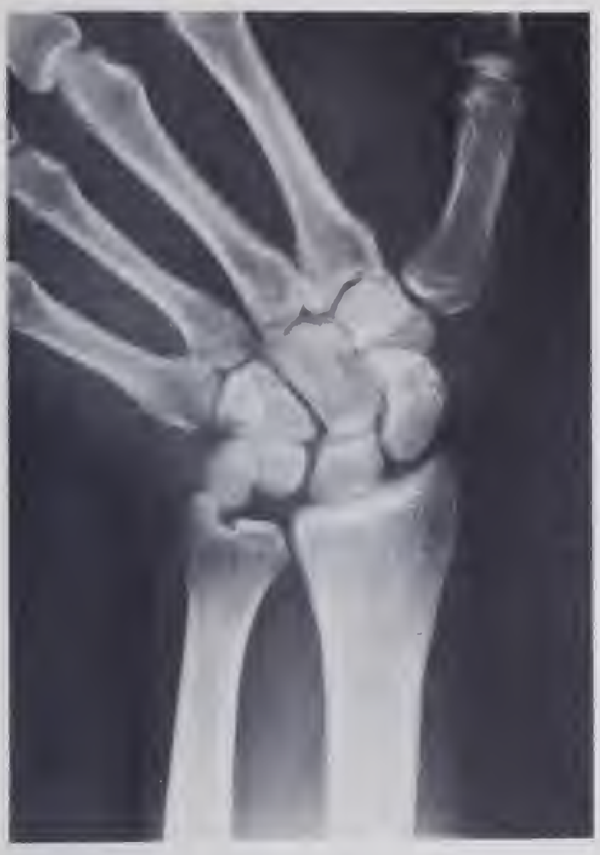

Figure 1A & 1B
Standard Anteroposterior and lateral x-rays, showed no fracture 5 weeks after injury.

wrist and the forearm holder. The wrist is placed in maximum dorsiflexion by the patient hyperextenting his fingers with the opposite hand. The beam is centered on the tip of the hamate at an angle of 25 degrees from the long axis of the palm. In this particular patient, several x-ray views had to be repeated until the hamate was well visualized and the fracture line became evident. (Figure 1C)

Management

Since a majority of these fractures are seen late and fail to heal, the treatment recommended for most is surgical excision of the loose fragment.[1] Our patient was advised of this recommended technique; however, he elected cast immobilization for 6 weeks. At the end of this time the cast was removed and his wrist pain had disappeared. He then was able to grasp surgical instruments without pain. On follow up one year post-injury he remains symptom free and his grip strength has returned to normal. The fracture line is no longer evident on x-ray, (Figure 2) proving the exception to the usual course of such unrecognized injuries..

This case illustrates that when examining a patient with a "sprained wrist" one should be wary of more than scaphoid fractures. Al-

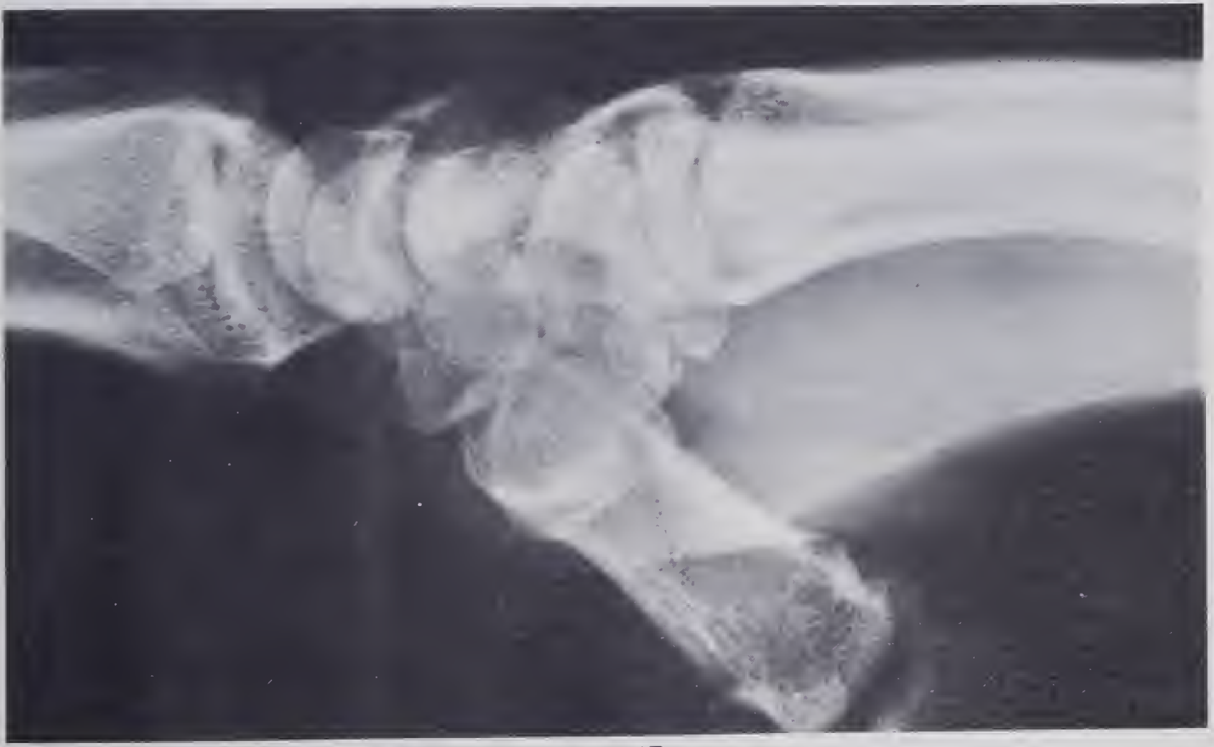

Figure 1B

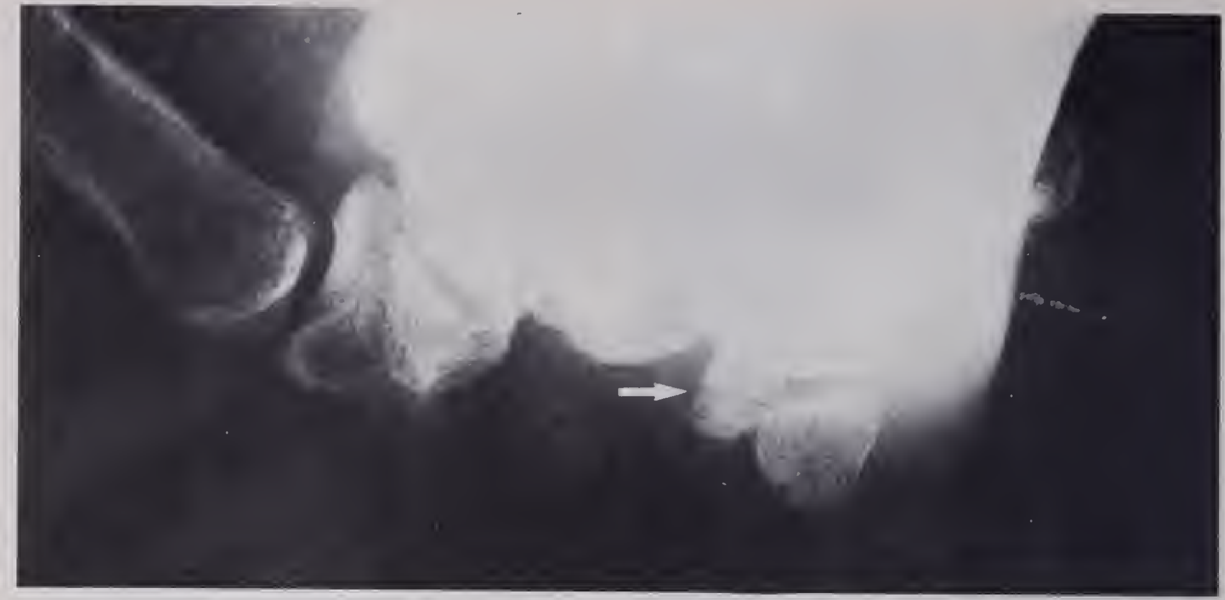

Figure 1C
Carpal tunnel view shows hamate fracture (arrow).

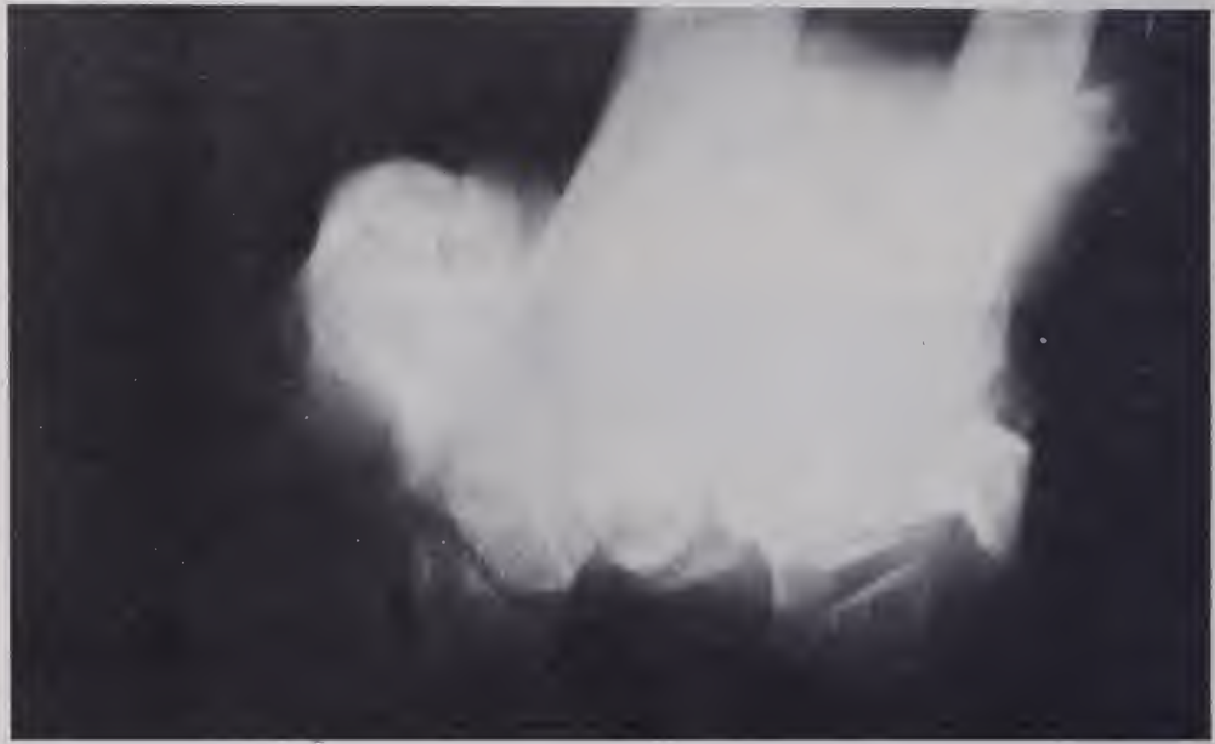

Figure 2
Carpal tunnel view 1 year after injury shows healed fracture.

though there is such a thing as a "sprained wrist", careful clinical examination and selective roentgenographic studies are needed to rule out frequent and difficult to diagnose carpal fractures.

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President's Page

LOCAL PROGRAMS TO PROVIDE ASSIGNMENT FOR ALL LOW-INCOME MEDICARE BENEFICIARIES

Hiram R. Walker, M.D.

All State Medical Associations and County Medical Societies have received a letter from John J. Coury, M.D., A.M.A. president, requesting the sponsoring of programs for the low-income elderly. The Board of Trustees of the A.M.A. is asking physicians to continue to accept assignment for Medicare beneficiaries whose economic situations dictate the need for this type of assistance. In addition, the A.M.A. is asking that medical societies take the lead in developing formal programs at the local level to help provide assignment for all low-income beneficiaries. As Dr. Coury notes, physicians enjoy a long tradition of providing medical care to the needy.

A number of local initiatives have already been developed around the country. The Nebraska Academy of Ophthalmology in cooperation with the American Academy of Ophthalmology instituted a program as of February, 1986 for their members to accept assignment for low-income Medicare patients. Many of us are already accepting assignment for selected elderly patients who are in financial need. I would suggest that we develop criteria and guidelines at both the state and local county society levels to institute this program for the low-income elderly. A Voluntary Medicare Assignment Plan sponsored by the State and County Medical Societies should receive favorable publicity through the news media by indicating our sensitivity to the needs of the low-income elderly.

While the A.M.A. continues to work for reform of the Medicare program with an actuarially sound pre-funding program, catastrophic protection and equitable means testing, they urge physicians to continue to be sensitive to the economic situations of their patients. The activities and action of physicians at the local level adds to the efforts at the national level to influence the congressional decision making process.

Suz and I wish you all a Merry Christmas and a Happy New Year.

Hiram R. Walker, M.D.
President

The Auxiliary

THE HEALTH PROJECTS COMMITTEE NEWSLETTER

Dear Nebraska Auxilians:

We live in a day and age that has vast numbers of health problems and the need for volunteer support and beneficial programs seems almost overwhelming. Each year our auxiliary has a progressive dinner and the money we make is donated to worthwhile causes. Several years ago we had to search out agencies in financial need. This year they came to us and we had MANY worthwhile causes to pick from. The $700.00 that we did collect was divided up seven different ways.

When I sat down to consider the many important health projects for our State and community, I stopped counting after 30. What are you doing in your community? What is important? Is there something you have overlooked? Community outreach is the main objective of this year. Let your community know that the physicians' wives really care about them and that the auxiliary is a source of help, not just volunteer hours but also educational programs. There is no lack for projects to start or do in your community. The hardest task will be to narrow it down to a workable level. Maybe some year we can do a project on "physician wife burnout".

I hope that this newsletter can be of some help for your auxiliaries and give you some ideas of projects.

Good luck in your community and remember to buckle up. We need all the auxiliaries we can get.

Linda Brown,
Chairman

* * *

ANTI-SMOKING CAMPAIGN

The AMA has long been active in the fight against the dangers of tobacco. Now the organization is calling for a ban on magazine, newspaper, and billboard advertising of tobacco products and is calling for more publicity about the adverse health effects of snuff and chewing tobacco.

We will be distributing posters to your auxiliary about the hazards of smoking called "Ashes to Ashes". There is also available TV and radio spots for $75.00 to $20.00. This is a 30 second PSA and the name of your auxiliary can be broadcast during the last 5 seconds of play. If you are interested in this, please notify Bev Kruger or Wendy Borow, AMA, Director, 1/312/645-4420.

* * *

COLO-RECTAL CARCINOMA

Ardis Grace should receive five gold stars from the auxiliary for her many efforts in colo-rectal cancer screening. She has spent the last nine years in promoting programs to alert people to colo-rectal cancers and how a simple test can help spot the malignancies in their early stages.

Now she wants to take this information to the Lions Clubs in Nebraska. The Blair and Bellevue Lions Clubs have heard the presentation in October.

* * *

SEAT BELTS

I'M HOPING that the seat belt law passes in the election in November, but if it does or doesn't, education on seat belt usage is still needed. In the next four years in Nebraska it is projected that 1,200 Nebraskans will lose their lives on the highways and 76,000 will be severely injured. This will cost the taxpayers 708 million dollars. Seat belts will greatly reduce that number. Many people in Nebraska have been saved this last year due to the seat belt law and three of them were good friends of mine. Is there a program in your driver's education classes at the high schools? What about the Lamaze classes? If you need help getting a program started call me. I have enough information to get you started.

Linda Brown
402/463-7735

* * *

MOMS AND MOMSA JOIN HANDS FOR MEDIFILE PROJECT

Article taken from MOMSA Newsletter

The Society and Auxiliary are at work on a joint health project — the MEDIFILE CARD. This triple-fold wallet-size card is a record of a patient's current medications and a brief medical history. It will be given to patients by their physicians and updated at each office, clinic or hospital visit.

This service to the elderly and those with chronic illness will be of educational benefit to the patient, and provide vital information to consulting or emergency room physicians and rescue personnel when the patient's records or primary physician are not available.

Does this sound like a project you might be interested in? Call Barb Goodrich, 711 South 127th Street, Omaha, NE 68154 (1/402/334-1228) for more details.

* * *

JUST SAY "NO"

In an age when sexual promiscuity is as close as your TV set and you can't go to a PG-13 movie without seeing nudity, premarital sex, and explicit sexual language, the teenagers of today experience tremendous peer pressures.

In Hastings, as in ALL communities, teenage pregnancy has increased substantially and is becoming overwhelmingly a community problem, second only to alcohol abuse. We have started a teenage pregnancy taskforce in our community to try and equip teenagers with help in saying "NO" to sex. Pamphlets on this project will be completed in December, video tapes are now available in our public library on saying "NO", and preventive programs are starting that will reach even down to the third grader.

Dr. Jan Howe

I have an excellent pamphlet called "A Parents' Guide to Teenage Parties" that can help your auxiliary with a project like this. Call me if you need a copy. Linda Brown 1/402/463-7735.

If you don't think that this is a project that needs to be worked on in our auxiliaries, consider this statement in the November 10, 1986 **U.S. News and World Report:** "Starting in 1990, the disease AIDS will kill as many Americans each year as the Viet Nam war killed in an entire decade - 58,000." Teaching our kids "NO" may save their life.

Linda Brown

* * *

SHAKING SHOCKER

(One shake can last a lifetime).

Most people are unaware of the serious consequences that can result when we shake a child or throw a child in the air. A simple fun game of toss the baby in the air could cause death or mental retardation due to brain injury. Orange County Medical Auxiliary has published an excellent pamphlet on the dangers of shaking a child. We are now in the process of publishing a pamphlet like this with phone numbers of local child abuse agencies. I hope to have this pamphlet available after January and will send it to the County Presidents.

Linda Brown

* * *

PROJECT PLUS

Project Literacy U.S. (PLUS) is a project that is combining local community efforts with a national media focus on adult illiteracy. From September 1986 through May 1987, ABC and PBS will present programs and public service announcements about adult illiteracy, America's hidden problem.

The three goals of PLUS are: 1. to raise national awareness of the illiteracy problems; 2. to develop and encourage volunteer action to address illiteracy; and 3. to encourage those who can help and those who need help to participate.

An estimated 27 million Americans are functionally illiterate (reading, writing and math skills below the 4th grade level). Many millions more are classified as semi-literate, (those whose skills are at 5th to 8th grade levels). Illiteracy is often the root cause of social and economic problems.

What can we do to help? Contact the adult education programs at your local high schools and/or colleges. Offer to assist in the adult education classrooms. Contact your local public library or the Literacy Council in Omaha

(Beverly DiMauro, Literacy Council, 923 N. 38th St., Omaha 68131) and ask about training sessions in the Laubach method of teaching on a one to one basis. Be alert to how well your children are reading in school. Offer incentives to develop better readers. One such national program is "Book It" sponsored by Pizza Hut. Start a Project PLUS Task Force in your community and get the word out where people can volunteer to be tutors and where they can go to get help to improve their literacy skills.

Illiteracy can be remedied if **those who can help** will mobilize training opportunities and **those who need help** can be motivated to learn.

Nancy Nielsen

COUNTY AUXILIARY NEWS

UNITED WAY KICK-OFF PARTY

The Hastings Medical Auxiliary hosted a United Way Kick-Off Party at the Hastings Museum on September 30th. The theme for the evening was "Give From the Heart". Our goals in organizing this project were to: help publicize the United Way Fund Drive, to show our community that "doctors' wives care", and to show our support for the United Way Director, who is a Hastings physician, Dr. Tom Tonniges.

To organize this function, we divided the work responsibilities into the following committees:

Chairman: Jane Tonniges
Hostess Committee: Margaret Sheffield
Decorations: Gretchen Vondrak
Name Tags and Invitations: Paige Wycoff
Entertainment: Pat Kingsley
Refreshments: Sue Miller

Our approximate 400 guests were greeted by the United Way Directors and given name tags by auxiliary members. All the medical auxiliary members present wore hostess ribbons and buttons saying, "Doctors' Wives Care".

The guests entered the museum to see banners hanging from the balcony, each one representing the agencies who benefit from United Way funds. Serving tables were set at either end of the room. The tables were laid with mirrors and centered with large bouquets of flowers using the colors of the United Way. Candles coordianted with the bouquets and were lit to give a formal atmosphere.

Our auxiliary served cranberry punch and coffee at each table. Our members donated three kinds of cake (Kahlua, Rum and Apple), which we cut and decorated in the kitchen and served at both tables. We also served heart-shaped cookies and mints to carry out our theme. "Give From the Heart". Marcelo Casenove, a classical guitarist, provided background music.

Refreshments were followed by addresses from the United Way Directors, Governor Bob Kerrey, and Hastings Mayor, Hal Smith, Jr. The United Way Agency directors presented a skit.

It was an exciting project for our auxiliary. Those attending enjoyed themselves, and the publicity from the evening's activities was a tremendous benefit to the fund drive.

Sue Miller,
Adams County Medical
Auxiliary President

Welcome New Members

John Jacobsen, M.D.
900 Norfolk Ave.
Norfolk, NE 68701

Mark W. Serbousek, M.D.
310 W. 7th
McCook, NE 69001

Michael J. Sullivan, M.D.
1405 - 5th St.
Aurora, NE 68818

Dan P. Warlick, M.D.
916 W. 10th
Alliance, NE 69301

Coming Meetings

UNIVERSITY OF NEBRASKA

33RD ANNUAL SCIENTIFIC MEETING - NEBRASKA OB-GYN SOCIETY — December 4, 5, 6, 1986 at the MGM Grand Hotel, Las Vegas, Nevada. 9 Hours Credit. Fee: $200. Contact: Dennis Beavers, M.D., 720 N. 87th Street, Omaha, Nebraska 68114, (402) 390-1200.

UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE - ALPHA OMEGA ALPHA — December AOA Day, Wednesday, Dec. 10, 1986 at the UNMC Campus, Omaha. Convocation at 12 noon in CCE Amphitheater. Speaker M. Therese Southgate, M.D., Deputy Editor of **The Journal of the American Medical Association,** of Chicago, Ill. Convocation title: "Some Affinities Between Art and Medicine". Reception for AOA Nominees, 5:30-7:00 p.m., in CCE Lobby, UNMC Campus, Dec. 10. Other AOA Day activities to be announced.

7TH ANNUAL MEDICAL & SKI CONFERENCE — "Diagnostic Dilemmas: The Approch and the Answers" — February 15-19, 1987 at the Keystone Conference Center, Keystone, Colorado. Sponsored by the Univeristy of Nebraska College of Medicine Department of Internal Medicine. Program is being offered to physicians at the same time that the College of Nursing is offering a nursing ski conference and the College of Dentistry will be offering their annual Dental Ski Conference. Approved for 16 hours of AMA Category I and AAFP prescribed hours. For more information contact Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. Telphone (402) 559-4152.

36TH ANNUAL OB-GYN CONFERENCE — March 12-13, 1987 at the Holiday Inn Central, Omaha, Nebraska. Fee: TBA. Contact Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, Omaha, Nebraska 68105. (402) 559-4152.

FAMILY PRACTICE REVIEW - A COMPREHENSIVE UPDATE — March 30-April 10, 1987 and April 27-May 8, 1987 at Omaha, Nebraska. Sponsored by the University of Nebraska College of Medicine. Registration Fee: $850. (One week registration available with special arrangements). Contact: Marge Adey, University of Nebraska Medical Center, Center for Continuing Education, 42nd and Dewey Avenue, Omaha, Nebrask 68105. Phone: (402) 559-4152.

For further information or to register, contact: Marge Adey, Coordinator of Continuing Medical Education, University of Nebraska Medical Center, 42nd and Dewey Avenue, Omaha, Nebraska 68105. (402) 559-4152

UNIVERSITY OF KANSAS

For information concerning the following continuing education offerings sponsored by the University of Kansas Medical Center contact: Carole Rosen, Promotions Coordinator, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Boulevard, Kansas City, KS 66103 (913) 588-4480.

LEGAL MEDICINE: THE NEW SOLUTION — Jan. 18-24, 1987 — Sponsored by University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Location: Puerto Vallerta, Mexico. 16 Category I AMA, AAFP credit hours.Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

A SPECIAL WORKSHOP ON THE USE OF CO_2 LASER IN ENT SURGERY — Jan. 30, 31, and Feb. 3, 1986, Apr. 10, 11 and 14, 1986, Sept. 25, 26, and 29, 1986, and Dec. 11, 12, and 15, 1986 (3rd day optional - O.R. instruction). Sponsored by the University of Kansas Medical Center. Located at Sudler Hall, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, Kansas. 15 hrs. AMA (cat.l), 9 hrs. or .9 American Nurses Association. Fees 2 days $750 physicians, $300 nurses; 3 days (includes O.R. instruction) $900 physicians, $350 nurses.

INTERNAL MEDICINE SYMPOSIUM — Mar. 1-7, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. 18 Category I AMA, AAFP credit hours. Location: Cancun, Mexico. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

COMMON PROBLEMS IN GASTROENTEROLOGY — Mar. 16, 1987 — Sponsored by: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP. Location: TBA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

SAM E. ROBERTS NUTRITION — Mar. 31, 1987 — University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

WHAT'S NEW IN DIABETES — Apr. 1, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE, ADA. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th & Rainbow, Kansas City, KS. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

PEDIATRICS — Apr. 2-3, 1987 — Sponsored by the University of Kansas Medical Center. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA, AAFP, CNE. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

37TH ANNUAL ANESTHESIOLOGY SYMPOSIUM — Apr. 24-26, 1987 — Sponsored by the University of Kansas Medical Center. Location: Crown Center Hotel, Kansas City, Missouri. Credit: AMA, AAFP, AANA. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103.

TWELFTH ANNUAL FAMILY PRACTICE SYMPOSIUM — April 29-30, 1987. Sponsor: University of Kansas Medical Center. Location: Crown Center Hotel, Kansas City, Missouri. Credit: AMA, AAFP. Contact: Eileen Buttron, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4494.

THIRTY-FIRST ANNUAL INFECTIOUS DISEASES SYMPOSIUM — May 1, 1987. Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow, Kansas City, Kansas 66103. Location: Crown Center Hotel. Credit: Category I AMA, AAFP. Contact: Eileen Buttron, University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, Kansas 66103, (913) 588-4494.

KANSAS MEDICINE — May 15, 1987 — Sponsor: University of Kansas Medical Center, Office of Continuing Education, 39th and Rainbow Blvd., Kansas City, KS 66103. Credit: AMA and AAFP. Location: Battenfeld Auditorium, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. Contact: Eileen Buttron, Office of Continuing Education, University of Kansas Medical Center, 39th and Rainbow Blvd., Kansas City, KS 66103. 913/588-4494.

CREIGHTON UNIVERSITY

CURRENT CONCEPTS IN OPHTHALMOLOGY — Dec. 6, 1986 — Marriott Hotel, Omaha, Nebraska. Program Director: Ira Priluck, M.D.

1987

CORONARY HEART DISEASE AND HYPERTENSION — Feb. 1-6, 1987 — Freeport, Bahamas. 28 credit hours in Category 1. 28 Prescribed hours A.A.F.P. Registration fee $375.00 prior to Nov. 1; $450.00 after Nov. 1, 1986.

PATHOLOGY AND TREATMENT OF ESOPHAGEAL DISORDERS — Feb. 12-17, 1987 — Wyndham Rose Hall Beach Motel, Montego Bay, Jamaica. 24 credit hours in Category 1. Enrollment limited to 20. Registration fee $475.00.

ADVANCES IN ANTITHROMBOTIC THERAPY — Mar. 14, 1987 — Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

FLORIDA TUTORIAL (OB-GYN) — Mar. 26-27, 1987, Airport Marriott Hotel, Orlando, Florida, Program Director: Gilles R.G. Monif, M.D.

THE ROLE OF ECHOCARDIOGRAPHY IN THE DIAGNOSIS AND MANAGEMENT OF CARDIAC EMERGENCIES — Apr. 10-11, 1987, Saint Joseph Hospital, Omaha, Nebraska. Program Director: Syed M. Mohiuddin, M.D.

MAURICE E. GRIER SYMPOSIUM (OB-GYN) — June 6, 1987, Marriott Hotel, Omaha, Nebraska. Program Director: James W. Daly, M.D.

For further information or to register, contact: Creighton University School of Medicine Division of CME, Omaha, NE 68178, 402-280-2550 or outside Nebraska Toll Free 800-228-7212, Ext. 2550.

UPCOMING UNMC CONTINUING EDUCATION COURSES

ADVANCED CARDIAC LIFE SUPPORT — Dec. 3-4, 1986 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Jan. 13-14, 1987 — Initial Certification Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 10, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Feb. 11, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Mar. 10-11, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — Apr. 15, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 18-19, 1987 — Initial Certification. Omaha, Nebraska. Registration Fee: $130. 14.5 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — May 20, 1987 — Instructor Course. Omaha, Nebraska. Registration Fee: $60. 6.0 Hours AMA Category I.

ADVANCED CARDIAC LIFE SUPPORT — June 1, 1987 — Recertification. Omaha, Nebraska. Registration Fee: $50. 7.2 Hours AMA Category I.

For further information, contact Ann Fitzgerald, University of Nebraska Medical Center, Center for Continuing Education, 42nd & Dewey Avenue, Omaha, Nebraska 68105-1065. Phone (402) 559-4152. In Nebraska, call: 800-228-1095. All other states (except Alaska), call: 800-228-9630.

NATIONAL JEWISH CENTER FOR IMMUNOLOGY AND RESPIRATORY MEDICINE

TRIBUTE TO HYMAN CHAI, M.D. — January 10-14. National Jewish Center for Immunology and Respiratory Medicine Keystone Summit at Keystone, Colorado. Topics: Allergy, Asthma, Pharmacology, Advances in Immunology, Diagnostic Testing and more. Fee: $325. $165 for Allied Health and Physicians in Training. 15.5 hours of AMA Category 1 Credit. For more information contact: Jeri Wagner, National Jewish Center for Immunology and Respiratory Medicine, 1400 Jackson Street, Denver, CO 80206. 303-398-1000.

REPORTS OF OFFICERS, DELEGATES AND COMMITTEES

FALL SESSION

September 25, 26, and 27, 1986

(These reports appear as originally submitted. For the House of Delegates deliberations, possible changes, and final action, refer to the minutes which follow these reports.)

REPORT OF THE BOARD OF DIRECTORS

Hiram R. Walker, M.D., Kearney - Chairman; L. Dwight Cherry, M.D., Lincoln; Francis Donahue, M.D., Omaha; Robert F. Shapiro, M.D., Lincoln; Paul E. Collicott, M.D., Lincoln; Donald J. Pavelka, M.D., Omaha; Richard A. Raymond, M.D., O'Neill; Alvin A. Armstrong, M D., Scottsbluff; Richard H. Meissner, M.D., Omaha; Stanley M Truhlsen, M.D., Omaha.

The Board of Directors has held several meetings subsequent to the 1986 Annual Session and presents the following items to the House of Delegates for its information and/or approval.

1. The Board considered the current dues level and it was noted that year-end balances have been negative in part due to the fact that while basic costs increased, there has been no increase in dues for three years. It was further noted that while there is an ongoing effort to increase the number of members, the total number of dues paying members has not increased substantially in recent years. In addition, it was determined that the proposed five-year graduated dues structure for new members will have a negative impact on Association income. Based on the above facts the Board is proposing to the House that there be a $20 dues increase implemented as of January 1, 1987. Association dues would thus increase to $285.00.

2. The Association received a letter from Ms. Gina Dunning, Director of the Department of Social Services, which requested that the NMA appoint a committee to review the subject of the provision of care to Medicaid recipients. She proposed a communication mechanism be established with the Department through which physicians' concerns, opinions and suggestions would be considered. A committee has been established and an initial meeting has been held with a series of concerns being submitted.

3. The Board considered a request from the Physician's Advocacy Committee that a specific budget item be earmarked for expenses of this committee that might occur because of activities associated with its duties. A budget item was provided and the chairman of the committee was so notified.

4. The Board discussed the directive from the House that a study be commissioned to determine membership discontent regarding the relationship between the NMA and the NFMC/PRO. It was determined that an outside organization should conduct the study and Mr. Joe Williams entered into a contract with the Association to develop and carry out the distribution and tabulation of the questionnaire.

While noting that the results favored a continuation of the relationship, the Board voted to withdraw cross over representation of the NMA to the NFMC/PRO Board of Directors effective July 31st, 1986. The Board also decided to ask Mr. Williams to address the House of Delegates at the Fall Session and relate the specific numerical results of the survey. Mr. Williams will be present during the House of Delegates meeting to present a summary of his report.

5. The Board considered a five-year graduated dues structure for new physicians as directed by the House. Recognizing that dues costs for new physicians may be a major factor in joining the Association, the Board adopted the graduated five-year dues structure for new physicians. The Board also recommends that County Medical Societies implement a similar action.

6. The Board considered the recommendation of the Commission on Association Affairs that a new pamphlet be developed describing membership benefits. The Board reviewed the materials currently sent to prospective members describing the Association and the benefits to be derived by membership, and also reviewed the packet of material sent to members when they join. It was the Board's decision that the materials currently available and provided are adequate at the present time. It was further noted by the Board that an intensive membership campaign was initiated in late 1985 and it has continued through 1986.

7. The Board considered the directive of the House that the Association take aggressive action to resolve the professional liability financial issues which impede the establishment and distribution of physicians. The NMA will closely monitor a general liability bill to be introduced in the 1987 Nebraska Legislative session. The bill represents concerns of business and industry representatives, and others who are faced with the issue of liability insurance problems.

8. The House directed the Association request Medicare, Medicaid and the Blue Shield organizations and other third party carriers to examine their positions and consider making provisions for fair and equitable reimbursement to surgical practitioners for surgical services rendered within 72 hours of the pre-operative period. The Board requested further clarification of the situation as it exists, however the response to the Board's inquiry has not been received to date.

9. The House directed the Association voice its support for Nebraska's mandatory seat belt legislation prior to the fall referendum vote. The Board has referred this matter to the Commission on Public Affairs and information will be distributed to the media prior to the vote urging citizens to vote to retain the mandatory seat belt law.

10. The Board considered members concerns regarding communicating with Iowa Blue Cross/Blue Shield, the current medicare intermediary. Communication has been established with the company and a representative from the Part B carrier will be present to make a report to the House.

11. The Board reviewed the compilation of approved health policy statements that has been developed and directed that the compilation be set up in booklet form and distributed to the membership.

12. The Board reviewed the resolution which would establish a hot-line for educational efforts for physicians and patients, and decided to take no implementation action as the financial costs associated with such a project would be sizeable.

13. The Board considered the action of the House which requested that a review be made of the days of the week on which the Annual Session was scheduled in order that participation in Fun Night and Sportsman's Day might be enhanced. It was decided to propose to the Scientific Sessions Committee that it consider a schedule which would provide that specialty societies meet on Saturday and Friday if necessary, the House convene on Sunday, Sportman's Day be held on Monday, Fun Night and the

Sportsman's Day award dinner be combined and scheduled on Monday evening, the final two sessions of the House be held on Tuesday morning, the Inaugural Banquet be held on Sunday evening, and that various socio-economic programs be scheduled as time permits on Sunday, Monday and Tuesday.

14. The Board considered that the AMA is in the process of establishing a section on young physicians and it was felt appropriate that the NMA develop a young physicians organization as well. The Board asked that the future role of an NMA young physicians commission or section be considered by the Commission on Association Affairs, and that the commission be asked to form an Ad-Hoc Committee to develop this concept, along with scheduling of an informational meeting for young physicians at the first opportune time.

15. In its responsibility of establishing and monitoring the financial affairs of the Association the Board decided that a study should be made of possibilities for increasing the Association's outside income, that income derived from other than membership dues. In this regard, it was decided that a sub-committee of the Board should be appointed to study this matter in detail and the study is currently under way.

16. A brochure has been prepared which presents selected physician manpower statistics as derived from the annual manpower report prepared by the Association. The Association monitors the physician to population ratios closely and it can be noted that a trend toward more rural practices is continuing and the physician to population ratios in Nebraska's larger counties continue to decrease.

The Board submits this report to the House for its consideration and stands ready to consider matters which may be referred during this Fall Session.

REPORT OF THE STATE DEPARTMENT OF HEALTH

Two years ago I presented to you goals which were established for the Department of Health by the Managment Team. Now I would like to review these goals, priorities associated with the goals, and recent developments in affected areas of activity. But first let me review the mission of the Department.

THE MISSION OF THE NEBRASKA DEPARTMENT OF HEALTH IS TO ACT AS THE FOCAL POINT FOR PUBLIC HEALTH IN THE STATE BY:

- PROVIDING THE PUBLIC WITH THE KNOWLEDGE, OPPORTUNITY AND ENCOURAGEMENT TO IMPROVE AND MAINTAIN THEIR HEALTH AND QUALITY OF LIFE;
- ASSURING THE PUBLIC THAT HEALTH RESOURCES ARE QUALIFIED AND ACCESSIBLE; AND
- PROTECTING THE PUBLIC FROM THOSE HEALTH RISKS OVER WHICH THE INDIVIDUAL CAN HAVE LITTLE OR NO CONTROL.

Bureau of Examining Boards. With this mission in mind, one of the goals set was to improve the efficiency and accountability of the regulatory process. In the area of licensing, the Bureau of Examining Boards currently is responsible for 23 different groups that are required by statute to hold a license in order to practice a health profession or occupation. These groups represent nearly 70,000 individuals with 5884 holding a license in Medicine and Surgery and, of these, 2600 practicing in Nebraska.

Recent changes have been made to increase our capabilities in handling complaints. Improvements have been made in procedures and systems for processing complaints, additional staff are now employed in the Division of Investigations, including an Associate Director for Investigations, and a new attorney is employed in the Attorney General's Office to provide legal counsel to the Bureau.

Since January of this year, there have been 28 complaints registered against physicians. These complaints have resulted in disciplinary action being taken against three physicians in the form of:

1. A limitation on the scope of practice of one physician;
2. A voluntary surrender of license by one physician; and
3. A petition filed for disciplinary action against the licensure of a physician, and such is pending at this time.

The remainder of the complaints are either under investigation and a final disposition has not been reached, or they have been closed due to no grounds for rendering disciplinary action against the physician's license to practice medicine and surgery.

Credentialing Review. We are now in our second year of reviewing applications from groups that wish to become a licensed profession or occupation. Applications have been received from Naturopaths, Dietitians, Medical Technologists, and Recreation Therapists. These applications will be reviewed this Fall after which I will submit my recommendations to the Legislature.

Asbestos. Another goal that we are attempting to meet is to increase our capability to monitor and respond to current and potential environmental risks. New legislation requires that asbestos contractors be licensed by the Department which is also authorized to inspect asbestos removal sites. This program will be initiated next Spring after rules and regulations have been promulgated. This is a tax supported program.

Radon. This Spring a statewide survey was made to determine the presence and levels of radon in homes. The indoor air of 110 homes was tested and in some cases the drinking water was also tested. We found that 38% of the homes exceeded action levels for radon and 15% exceeded action levels for both radon and daughters. Currently we are investigating action needed to clarify the Department's responsibility for indoor air, particularly as related to private homes.

Prevention. Another goal that we have is to reduce preventable illness and premature deaths through effective prevention programs. High priority is being placed on AIDS, tobacco, and alcohol, and also on low birth weight babies and birth defects. The Governor's Health Promotion Coordinating Council is playing a major role in these areas. The Council plans to issue a Citizen Award in December to recognize exemplary lifestyle and to also issue a Model Employer Award with regard to an Employee Health Promotion Program. In the Spring a Model School will be selected to receive an award for having an effective school health program.

AIDS. Particular attention is being given to HIV/AIDS. We have drafted the following statement of philosophy and goals: "The Nebraska Department of Health recognized that HIV/AIDS is a serious public health problem in Nebraska. It is slow and hidden in onset, with no known cure and with characteristics that raise complex medical, legal, and social concerns. The programs for its prevention and control should respond to both the public's need for timely, accurate information and the affected person's need for appropriate, nonjudgemental health care." Therefore, we feel that the Department of Health should, within available resources, assume a leadership role and coordinate the state's resources in order to:

- Reduce the spread of HIV/AIDS in the general population of Nebraska;
- Limit undue anxiety in Nebraska residents concerning HIV/AIDS incidence;
- Reduce discrimination against HIV/AIDS affected individuals;
- Assure that appropriate treatment resources for HIV/AIDS individuals are available;
- Create a network among providers, state and local health departments, high risk groups, and the media to coordinate resources on HIV/AIDS;
- Collect all available data on HIV/AIDS incidence in Nebraska; and
- Identify and develop funding sources and appropriate levels of support within the State Health Department for the Nebraska HIV/AIDS Program.

The above goals have been set so that existing resources may be used to establish appropriate plans and coordinate activities for achieving end results.

Planning. Also in the area of planning, we have a goal to develop a health policy and planning process that is responsive to health problems and trends to health care. In recent years we have observed the effects of cost containment efforts in the use of health care. Since 1982, the occupancy rate of Nebraska hospitals has dropped from 58% to 43% in 1985. There is evidence from early 1986 utilization reports that this decline is continuing. In particular, the small rural hospitals are greatly affected and this, combined with the adverse economic conditions in the rural areas, is expected to cause financial difficulties in the future.

On the other hand, the rural communities in Nebraska appear to be gaining in physician supply. The Department, through the Health Manpower Referral Service and the Nebraska Medical Student Loan Program and by contract with the National Health Service Corps has played a role in the development, through the referral service, an average of 23 new practices have been established over the past nine years, with 35% of these in communities of 2500 population or less. Also, 17 physicians are now serving in Nebraska under the National Health Service Corps, and another five are serving under the Medical Student Loan Program.

Finally, we are continuing our efforts in setting forth clearly stated goals and objectives to further our efforts in public health. Each year, accomplishments are reviewed and priorities set for the next year. With limited resources, we feel that this is the most effective way of carrying out our mission.

I am looking forward to working with the Medical Association in facing the many challenges reflected by these public health priority problems.

Respectfully submitted,
Gregg F. Wright, M.D.,
Director

REPORT OF THE DELEGATE TO THE A.M.A.

The annual meeting of the AMA was held at the Marriott Hotel in Chicago, June 15-19, 1986.

There were 391 official delegates seated of which 313 represented state medical associations, 69 represented national medical societies, and 9 represented section and service delegates.

During the five day convention, the House of Delegates considered 39 reports from the Board of Trustees, 32 reports from the various Councils, and 109 Resolutions. The busiest of the Councils were those of Medical Education, Medical Service, and Scientific Affairs.

The scope of the work done by the House can be better appreciated if one realizes each of these reports and resolutions are originally submitted, then discussed and debated in the reference committees, and finally revised, debated, and adopted or rejected by the House of Delegates. Needless to say, this takes a considerable amount of time and effort by the participants.

(1) AMA FINANCES - One of the better bits of news for the membership of the AMA was the fact that the 1987 dues will remain the same as they have been.

It was interesting that the financial planners were concerned because for the fiscal year 1986, there is only $1,200,000 million revenue in excess of the expenses. In spite of this, and particularly in consideration of the present medical economics, the Trustees decided against a dues increase.

It was pointed out there are a number of factors which could erode this surplus. Such as, lower advertising revenue, higher production costs, and a lessened return on investments.

The matter of net losses associated with AMACO were considered. The House was told by the Board of Trustees that they will put no further capital from the AMA into the assets of AMACO.

Related to this was the decision to allow physicians under the age of 70 who retire to retain their AMA membership at only 20% of the regular dues. Prior to this, these physicians had to pay full dues. This change was suggested because of the larger numbers of physicians who are retiring early because of changing practice patterns.

(2) NEBRASKA RESOLUTION #29 - At the instruction of the NMA House of Delegates, the Nebraska delegation presented to the AMA Resolution #29 which dealt with the unfairness of current financing of Medicare. This resolution you may recall asks the AMA to study ways to communicate the unfairness of current congressional activities to balance the Medicare budget at the expense of health care providers, rather than institute the restructuring of the Medicare program necessary to put the program on a sound financial footing.

This resolution was considered by the reference committee in conjunction with another current resolution with a similar thrust, with two similar resolutions from the Interim 1985 meeting, and the Board of Trustees Report MM which had been prepared to answer the concerns of the two similar resolutions submitted in December, 1985.

The Report MM was a comprehensive proposal to replace the existing federal Medicare program with a new program to finance health care for the elderly. This innovative new program would be prefunded, and is designed to be fiscally sound. It would provide comprehensive coverage, including catastrophic coverage, and would have different levels of beneficiary cost sharing based on ability to pay. The new program would ensure free choice among competing health plans providing specified adequate benefits, and is intended to assure access to high quality health care by the elderly.

It was pointed out that the present pay-as-you-go system creates an intergenerational transfer of resources and is adversely affected by the worker-to-beneficiary ratio. The system presently used does not have catastrophic coverage and lacks the equitable means testing to keep costs down.

The newly proposed plan deals with program structure, benefits, premium costs, program funding, vouchers for health insurance coverage, and a health individual retirement account.

The House of Delegates adopted Report MM with some technical changes in its appendix in lieu of Resolution #29 (Nebraska) and the other resolutions noted above. They also requested that the Board of Trustees report back to the House of Delegates at the Annual 1987 meeting as to the status of the proposal to reform the financing of health care for the elderly.

(3) YOUNG PHYSICIANS - As an outgrowth of the AMA leadership's concern about membership, an Ad-Hoc Committee on Young Physicians was established in 1984. It was charged with surveying young physicians to find out their wants and needs.

It was noted that previously sections for Medical Students and Residents had been established and that they had gained rather wide acceptance. The problem, however, was once they had completed their training and had started to practice, it was hard for them to become assimilated into the rank and file of older AMA members.

The new section will be comprised of one delegate and one alternate delegate from each state. In addition, the entire section will be granted one delegate with voting privileges in the AMA House of Delegates.

This group of physicians under the age of 40 comprises 42% of the physician population. It was felt they had special problems hard to be appreciated by the older physicians, such as large debts on graduation and the fact many seek salaried employment rather than establishing an independent practice.

It was felt if the needs of these physicians were met, there would indeed be an increase in AMA membership.

(4) PHYSICIAN MANPOWER - The final report of the AMA Task Force on Physician Manpower was given. The report noted that current methodologies used to measure physician manpower neither produced a consistent picture of physician supply, nor did they offer a satisfactory standard.

Recent literature points to a general surplus of physicians in many areas of the United States as well as a surplus of some specialties. They felt the excess of specialists would have negative consequences on the quality and cost of patient care.

Some delegates in support of the minorities and foreign graduates amended the report specifically so that the AMA continue supporting the enrollment and retention in U.S. schools of under-represented groups.

One of the main thrusts of the report was to expand and alleviate the undesirable effects of a physician surplus. Their specific recommendations suggested continuing analysis of physician manpower issues, encourage medical educators to review and analyze physician supply and its impact on the cost and quality of care. To support repeal of federal laws and regulations mandating maintenance of any specified enrollment in medical schools. Work toward a more favorable geographical distribution of physicians by providing these physicians with complete information on locations and practice opportunities.

(5) PROFESSIONAL LIABILITY - The AMA chose not to oppose policies of hospitals and hospital liability insurance policies which require that a physician maintain a certain amount of liability insurance as one of the conditions of staff membership.

The resolution suggesting the opposition to this policy was submitted by the Ohio delegation but Hospital Staff Section and other opposed it almost unanimously. Everyone concluded it was reasonable to require their physicians to maintain adequate liability insurance, not only as a protection to themselves, but also as a protection of their colleagues.

There were also many other discussions in regard to professional liability and the insurance crises. There was a report of the Special Task Force on Professional Liability which gave an update on federal legislation, consideration of alternatives to traditional tort reform, and the AMA activities with numerous coalitions.

The response of the AMA to the allegations of the Trial Lawyers of America was noted. There was an increased amount of activity in risk management and there was the usual discussion of the need and effectiveness of peer review and the need to establish some discipline initiatives.

One item which had popular appeal and considerable support was the concept of establishing "liability courts" which would process only liability cases. This would be established after the pattern of the new existent compensation courts.

(6) COMPETITION - The House adopted two reports which reviewed the AMA initiatives to assist physicians in being competitive. They felt it would be unwise to endorse the development of a national delivery system because of conflict with the present AMA mission, the financial risks to the Association, and the potential adverse internal and external political ramifications.

A second report having to do with competition describes new and expanded AMA activities which are designed to improve the competitive posture of its members.

These consisted of analyzing existing and emerging delivery and financing systems and serving as a clearing house for medical societies and physicians. In providing contract assistance services. In providing statistical reports to physicians for any geographical area thru the AMA Market Area Profile Service. To assist physicians to secure suitable practice opportunities through the AMA Physician Placement Service. And to continue to bring to physicians timely information on practice development, socio-economics continuing medical education, risk management, and policy and political efforts of the AMA.

(7) ALCOHOL ADVERTISING - An item which drew a lot of attention of the national press was the AMA's posture on alcohol advertising, and counter-advertising.

This report recognized the sensitivity of the report and called for additional research on the subject. It strongly recommended discontinuation of alcohol advertising directed at youth.

It suggested the elimination of television programs depicting the irresponsible use of alcohol without showing its adverse consequences. It suggested the addition of health education labels on all alcoholic beverage containers. It further suggested the alcohol beverage industry accurately label all product containers as to ingredients, preservatives, and alcohol content.

(8) DPT VACCINE - The subject of DPT Vaccine and its medico-legal implications was again discussed in detail. The dramatic rise in the price of diptheria, pertussis, and tetanus vaccine prompted the House of Delegates to ask Congress to resolve the current crisis by enacting appropriate legislation.

Lederle Laboratories, one of the two manufacturers making the vaccine lost their liability coverage, and although the other pharmaceutical company, Connaught Laboratories, maintained their liability coverage, both increased the cost of the vaccine almost three times.

The urgency of the matter was emphasized when it was noted it is becoming more and more difficult for young parents to pay for DPT. Now it is a problem of affordability next it will be a problem of availability.

(9) PUBLIC AWARENESS CAMPAIGN - You may recall that at the interim meeting of the AMA in 1985, an Advisory Committee on Public Awareness was established. We are pleased that one of the North Central Conference members sits on that Committee, Dr. Tim Flaherty of Wisconsin.

This Advisory Committee reviewed current and planned AMA communication activities and made several recommendations to the House. These recommendations along with other potential projects will be studied by the Board and reported to the House at this 1986 interim meeting.

The Board assured the Committee that it is committed to a strong integrated program of communications activity. The Committee is just well under way and will no doubt prove beneficial to the continuing mission of the AMA.

(10) NEW SPECIALTIES IN AMA - Each session various groups seek membership and representation in the House of Delegates which gives them a vote on all deliberations.

This year membership was granted to the American Pediatric Surgical Association, the Renal Physicians Association, and the American Academy of Child Psychiatry.

The House turned down the application for membership of the American Association of Electromyography and Electrodiagnosis, the American Society for Dermatological Surgery, and American Association of Neuropathologists, and the American Society of Bariatric Physicians.

One of the criteria for membership is the fact that at least 50% of the membership must be members of the AMA. In many instances that is the main reason why membership is refused.

(11) ELECTIONS - As usual, the election of officers was held at this meeting. Dr. William Hotchkiss was elected President elect. He is from Virginia and was well received when he attended our annual session here in Nebraska a few years ago.

The Trustees elected were Alan Nelson of Utah, John Ring, Illinois, George Collins, New York, Ray Gifford, Ohio, and John Tupper (UNMC graduate) from California. Also, Ronald Davis the resident member was reelected.

In the reorganization of the Board of Trustees following the meeting Jerald Schenken was placed on the executive committee. This I am sure is in recognition of his many abilities and contributions.

The Nebraska delegation consisting of Drs. Cornelius, Gogela, and myself as delegates, along with Drs. Roffman, Walker, and Shapiro as alternate delegates thank you for the opportunity of serving as your representatives to the AMA.

Respectfully submitted,
John D. Coe, M.D.
Delegate

REPORT OF THE UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE

The last six months have been very successful at the University of Nebraska College of Medicine. I should like to emphasize the educational innovations occurring, but first shall briefly mention the important personnel changes. We have been successful in recruiting an outstanding academic anesthesiologist as Chairman of that department, Dr. Michael Nahrwold. He joined us June 1, moving from Ann Arbor, Michigan, where he was Chief of Pediatric Anesthesiology at the University of Michigan. We were also successful in our search for a new Chairman of the Department of Biochemistry. Selected was Dr. Edward Bresnick, who took over as Chairman September 1, performing the tasks of that position in addition to those he currently has as Director of the Eppley Institute for Research in Cancer and Allied Diseases. Finally, Dr. Jaime Frias, currently Professor of Pediatrics and Chief of Genetics at the University of Florida, will be recommended to the Board of Regents for the Chairmanship of Pediatrics. We expect Dr. Frias will be joining us December 1. We very much appreciate the outstanding job done by Drs. Kirk Phares and Philip Hofschire, interim chairmen of the Departments of Biochemistry and Pediatrics respectively.

Now, turning to our educational innovations, I shall mention the three most important:

1. **Introduction to Medicine in the 21st Century** - A unique workshop for freshmen medical students utilizing five simulated patient cases was held during the first week of school this fall. Each student was assigned to a group of 12 which was asked to spend three days researching one of the cases with the purpose of reporting back to the entire class in a "consultative" format. Several positive results occurred. Students were introduced to the concepts of self education and group learning, and, most importantly, learned valuable methods for utilizing the library, consultants, and outside agencies to research topics with which they were unfamiliar. Based on very positive evaluations by the students as well as an improvement in library skills as measured by pre- and post-testing, the introduction achieved its goals. Dr. Gerald Moore, Assistant Professor of Internal Medicine and Chairman of the our Curriculum Committee, organized this successful program. In addition to Dr. Moore and several other faculty, great credit for the success of this program goes to our library staff.

2. **Patient Simulations** - Patient simulators will be used at three levels during the Sophomore, Junior and Senior years and can be viewed as a three tier system. During the Sophomore year the purpose is to instruct the student in the history and physical exam. During the

Junior Year the goal is to give the student feedback on the level of skill development regarding the history and physical examination. During the Senior year the goal will eventually be evaluation of the student's skills on the history and physical examination with anticipation that successful completion of the patient simulatory "examination" will be necessary for graduation. This program is under the excellent direction of Drs. David Olson, Assistant Professor of Internal Medicine; Leeroy Meyer, Associate Professor of Internal Medicine; and Gerald Moore, Assistant Professor of Internal Medicine.

3. **Changes in the Anatomy Program -** The Anatomy program for medical students comprises five separate but synchronized courses, Gross Anatomy, Living Anatomy, Histology, Neuroanatomy and Embryology. Prior to this year, the Gross Anatomy course consisted of two gross anatomy lectures, one applied anatomy lecture and one clinical lecture plus five hours of dissection, per week for 24 weeks. Although a considerable amount of small group discussion did take place during the scheduled laboratory hours, it was somewhat random and totally unstructured. Living Anatomy, an introduction to Physical Examination, consisted of 24 one and a half hour laboratory sessions during which the students examine, on each other, the functional integrity of many of the structures they have dissected in the gross anatomy laboratory. Histology also covered 24 weeks with a total of 64 lectures and 16 two hour laboratory sessions. Neuroanatomy was completed in one 16 week semester containing 32 lectures and 8 two hour laboratory sessions. Embryology occupied 24 weeks with two lectures a week with only two small group discussion sessions towards the end of the program. In both the two latter courses, a small number of clinical correlation sessions were arranged. An extensive array of audio-visual materials, videotapes, film loops, slide tape programs, stereoscopic anatomy slides sets, radiographs and a variety of computer assisted instructional material, was made available, changed on a weekly basis, for individual study in our audiovisual room.

In response to the desirability of further encouraging independent learning, a number of significant changes have been made in the 1986-87 anatomy program. In Gross Anatomy the number of lectures has been halved; essentially only the applied and clinical lectures have been retained. They have been replaced by a weekly one hour small group tutorial in the gross anatomy laboratory. All other components of the course are unchanged. No changes have been made in the Living Anatomy program as the current format is essentally a practical one without a significant oral didactic component. Histology is also essentially unchanged. A small number of clinical correlation sessions have been introduced. The major changes have taken place in Neuroanatomy and Embryology. Didactic lectures in both have been abolished although the small number of clinical correlation sessions have been retained. Lectures have been replaced by a one hour a week relatively small group discussion over a reading assignment from a textbook and written material from the faculty. In Embryology, a significant amount of computerized autoinstructional material has been prepared and is now available in our audiovisual room.

In summary, taking all the anatomy courses as a whole, in round numbers, the number of lectures have been halved, from 250 to 120, many of those remaining being applied or clinical correlation lectures. Formal laboratory hours have been left unchanged at 200, and 64 one hour small group discussions have been introduced.

The introduction of these changes has been facilitated by the enlargement and reequipping of our "Holyoke-Latta Audiovisual Suite", made possible by a grant from the Alumni. Dr. W. K. Metcalf and the faculty of the Department of Anatomy have worked very hard to adapt their curriculum to the changes occurring in medical education.

Respectfully submitted,
Robert H. Waldman, M.D.
Dean

REPORT OF THE COMMISSION ON MEDICAL EDUCATION

Frederick F. Paustian, M.D., Omaha - Chairman; Robert L. Bass, M.D., Elkhorn; Patrick E. Brookhouser, M.D., Omaha; Christopher P. Crotty, M.D., Omaha; Charles F. Damico, M.D., Hastings; Charles A. Dobry, M.D., Omaha; A. Dean Gilg, M.D., Lincoln; William E. Lundak, M.D., Lincoln; Richard L. O'Brien, M.D., Omaha; Dwaine J. Peetz, Jr., M.D., Omaha; Joseph C. Scott, M.D., Omaha; Robert H. Waldman, M.D., Omaha; Mary Kirker, Omaha.

The Commission on Medical Education has not met since the spring meeting of the House of Delegates. However, it will meet during the month of September, 1986, to determine the status of accreditation of the following providers of continuing medical education, which were surveyed during the spring and summer of 1986.

Institution	**Surveyor(s)**
West Nebraska General Hospital Scottsbluff	Robert Bass, M.D. Mary Kirker, M3
Memorial Hospital of Dodge Co., Fremont	A. Dean Gilg, M.D.
Archbishop Bergan Mercy Hospital, Omaha	William Lundak, M.D.
Nebraska Methodist Hospital, Omaha	Christopher Crotty, M.D.
Medical Education Committee of the Lancaster County Medical Society and Lincoln Medical Education Foundation	William Gust, M.D. Dwaine Peetz, Jr., M.D.
Immanuel Medical Center Omaha	Patrick Brookhouser, M.D.

The manual, "Structure and Function of the Commission on Medical Education", was revised in accordance with the recommendations of the Accreditation Council on Continuing Medical Education in August, 1986. The backlog of institutions requesting re-accreditation has now been completed. Accordingly, all providers of continuing medical education programs will now receive the Policy and Procedure Manual for Accreditation for Intrastate Continuing Medical Education. Thereafter, all such provider institutions must be in compliance with the stipulated standards for provision of continuing medical education programs.

REPORT OF THE COMMISSION ON PUBLIC AFFAIRS

Rodney S. W. Basler, M.D., Lincoln - Chairman; H. Jeoffrey Deeths, M.D., Omaha; Herbert D. Feidler, M.D., Norfolk; Edward E. Gatz, M.D., Omaha; Donald T. Glow, M.D., Omaha; John J. Hoesing, M.D., Omaha; Roger P. Massie, M.D., Plainview; Donald E. Mathews, M.D., Lincoln; Harlan C. Shriner, M.D., Lincoln; F. Thomas Waring, M.D., Fremont; Beth Kolars-Bruening, Omaha.

The Commission is determining those positive attributes of which we, as members, wish to make the public especially aware, and presenting these positive accomplishments to the general public in such a way as to stimulate their support.

Current activities of the Commission aimed at improving public relations through gratuitous public service include the preparation and distribution on a regular monthly basis of "Health Tips" and other news releases which describe new medical findings in terms easily understood by laymen. These short subjects are released to local newspapers and radio stations across the state.

Newspapers will again receive copies of the NMA President's annual "State of the Health" report which is produced for media representatives. Radio stations received sixteen 30-second recorded "spots" on health items by NMA President Doctor Donahue which they often use. In addition, the Commission helped coordinate member participation in the televised "Health Line" series, and secure appropriate spokespersons for conferences and media interviews.

A number of new projects have been initiated which are intended to advance the concept of the physician as patient advocate among the general public. Included in these is the promotion of fitness, good health habits, and the attitude of wellness through press releases. Presently, we are stressing the strong support of the Association for retention of Nebraska's mandatory seat belt law.

Better exposure to the press of selected Nebraska Medical Journal articles, including interviews with the authors, is expected to both increase lay interest and awareness and stimulate more state physicians to become contributors. A brochure explaining the various forms of health insurance and distribution systems has been made available to NMA members for patient distribution within the last year.

REPORT OF THE COMMITTEE ON HEALTH PLANNING

Carl J. Cornelius, Jr., M.D., Sidney - Chairman; Gordon D. Adams, M.D., Norfolk; Lewiston W. Birkmann, M.D., Lincoln; James S. Carson, M.D., McCook; Chris C. Caudill, M.D., Lincoln; Allen D. Dvorak, M.D., Omaha; Dale W. Ehers, M.D., Lincoln; Louis J. Gogela, Jr., M.D., Beatrice; Roger D. Mason, M.D., Omaha; Donald F. Prince, M.D., Minden; C. Lee Retelsdorf, M.D. Omaha; Thomas H. Wallace, M.D., Gordon; George Zieg, Omaha.

The Committee on Health Planning has not had a formal meeting since the Annual Session but one is planned in conjunction with this session. The Committee will be discussing the policies developed by the AMA's Health Policy Agenda project and deciding what actions to recommend to the NMA regarding these policies. The HPA project is nearing completion and will be considered by the AMA House of Delegates at its 1987 annual meeting. It is anticipated that the AMA Federation can endorse most of the policies but some will be quite controversial. It is the goal of the HPA project to use the final draft as the basis for health activities, particularly legislative, for the next 10 years or more.

The current edition of the State Health Plan continues under development by the State Health Coordinating Council and release for public review and comment is currently scheduled following the SHCC meeting of September 12th.

Your Chairman, after nomination by the NMA, was appointed by the Director of Health to chair a Task Force on Government Regulation. The second meeting of this task force should take place on September 5, 1986. The charge to the committee is to develop a process identifying duplicative and non cost-effective regulations for health care facilities that should be eliminated or modified. A final report is called for by October 31, 1986, and will be distributed to key decision makers. It is the hope of most health care facilities that the work of this task force may result in some reduction in state regulation, some change in the attitude of the surveyors, and possibly the combining of some of the inspections by different branches of state government resulting in fewer and more meaningful and even helpful surveys.

Your Committee will continue to monitor activities in the health planning arena and solicits your input and comments.

REPORT OF THE AD-HOC COMMITTEE ON HEALTH POLICY STATEMENTS

C. Lee Retelsdorf, M.D., Omaha - Chairman; Daniel S. Durrie, M.D., Omaha; Darroll J. Loschen, M.D., York; Dale E. Michels, M.D., Lincoln; Charles S. Wilson, M.D., Lincoln; Frederick Youngblood, M.D., Omaha.

The Ad-Hoc Committee on Health Policy Statements has responsibility for developing position papers for consideration by the House of Delegates.

The Committee presents the following statement to the House for its consideration:

NEBRASKA MEDICAL ASSOCIATION

HEALTH POLICY STATEMENT

PRIMARY CARE

According to the Nebraska Medical Association, primary care is a type of medical care delivery which emphasizes first contact care and assumes ongoing responsibility for the patient in both health maintenance and therapy of illness. It is a personal care involving a unique interaction and communication between the patient and the physician. This primary care must be provided by a Doctor of Medicine or Osteopathy because it is comprehensive in scope and includes the overall coordination of the care of the patient's health problems, be they biological, behavioral or social. Only a Doctor of Medicine or Osteopathy has the breadth and depth of education, training and experience necessary to provide comprehensive patient care. The appropriate use of consultants and community resources is an important part of effective primary care.

The Committee recommends this statement be adopted by the House of Delegates.

REPORT OF THE SCIENTIFIC SESSIONS COMMITTEE

Sushil S. Lacy, M.D., Lincoln - Chairman; Donald E. Waltemath, M.D., Lincoln - Convention Chairman; David L. Bacon, M.D., Kearney; Paul J. Bender, Jr., M.D., Omaha; Michael A. Breiner, M.D., Lincoln; Mark A. Christensen, M.D., Omaha; Richard A. Hranac, M.D., Kearney; Donald J. Larson, M.D., Lincoln; Donna K. Nelson, M.D., Omaha; Richard M. Tempero, M.D., Omaha; Andrew Blankenau, Omaha.

The Scientific Sessions Committee met on August 21, 1986, for the purpose of initiating plans for the April 24-28, 1987, Annual Session of the Nebraska Medical Association. The recommendation of the Board of Directors was read to the Committee so that it might be given full consideration in the planning of the upcoming meeting. Specialty society meetings will be scheduled on Friday and Saturday prior to the convening of the House of Delegates, which will be carried out on Sunday. The Inaugural Banquet will be held Sunday evening.

Monday morning, a socioeconomic breakfast program will be carried out, followed by the professional liability seminar. Monday afternoon will be given over to Sportsman's Day, with the banquet to follow. An effort will be made to combine the Sportsman's Day banquet and Fun Night, although the logistics of potential sites of having the banquet, etc., will have to be taken into consideration. On Tuesday, the two sessions of the House will be held in the morning.

During the committee meeting, various speakers were considered for invitation to the NMA sponsored events. We also heard from representatives from the specialty societies reviewing their plans and requests for time.

REPORT OF THE COMMISSION ON LEGISLATION & GOVERNMENTAL AFFAIRS

Craig L. Urbauer, M.D., Lincoln - Chairman; Ronald L. Klutman, M.D., Columbus - Co-Chairman; Dwaine J. Peetz, M.D., Neligh; Judith A. Butler, M.D., Superior; James H. Dunlap, M.D., Norfolk; Charles Gregorius, M.D., Lincoln; Bruce W. Henricks, M.D., Fremont; Barbara M. Heywood, M.D., Papillion; John T. McGreer, III, M.D., Lincoln; Dennis G. O'Leary, M.D., Omaha; Robert G. Osborne, M.D., Lincoln; Richard A. Raymond, M.D., O'Neill; Herbert E. Reese, M.D., Lincoln; Jerald R. Schenken, M.D., Omaha; Bruce D. Smith, M.D., Kearney; Jean Sahs, Omaha; Brenda Barth, Omaha.

There has continued to be legislative activity since the spring meeting of the House of Delegates. Over the course of the summer we have been involved with reviewing the applications for licensure of the radiologic technicians, the medical technicians and the naturopaths. The technical committees for these reviews have been appointed and testimony has been arranged and presented. At this time, there have been no reports come from any of the technical committees which for the most part are still deliberating.

We've also had contact with the Nebraska Department of Social Services regarding attempts to improve the communication between the Department and Nebraska physicians regarding problems associated with the care of Medicaid patients and reimbursement to Nebraska physicians for this care. NMA was contacted by the Department to assist in attempting to improve circumstances involving Medicaid recipients. A meeting was held at NMA headquarters where a representative group of Nebraska physicians identified several of the concerns and problems and these have been conveyed back to the Department. A joint meeting with the Department of Social Services and the NMA will be held in the foreseeable future and may have been held by the time of the House meeting.

We have attempted to improve the legislative and lobbying activities of the NMA by involving more members in this activity. This led to a legislative awareness and planning seminar which will be held in conjunction with the Fall Meeting of the House on Thursday, September 25th.

We anticipate that the 1987 session of the Unicameral will be a busy time for the Nebraska Medical Association. Some of the potential issues which we'll attempt to confront include the following: Other groups seeking recognition through the #407 process; direct payment by third party payors to certain allied health groups; sales tax on services; payment of health care for indigent persons; increase in licensure fees; and liability, both professional and general.

Finally with the upcoming session of the Unicameral there will be several new Senators and we'll attempt to orient them to some of the concerns of organized medicine. Previously we have taken them through a tour of the University of Nebraska Medical Center and hosted the Senators and their spouses/guests at a social activity during the session of the Legislature and it's anticipated we'll attempt to do something of that nature again this year.

As always, we are very interested in suggestions, comments and ideas from the members of the NMA regarding legislative activities. We'll be calling upon the membership and the Auxiliary for help in support of our positions in the Unicameral.

REPORT OF THE COMMISSION ON ASSOCIATION AFFAIRS

Harry W. McFadden, M.D., Omaha - Chairman; R. A. Blatny, M.D., Fairbury; Stuart P. Embury, M.D., Holdrege; Joel T. Johnson, M.D., Kearney; Bernard L. Kratochvil, M.D., Omaha; Walter O'Donohue, M.D., Omaha; Joseph E. Stitcher, M.D., Lincoln; R. C. Weldon, M.D., Nebraska City; Marilyn Mellor, Omaha.

The Commission on Association Affairs has held one meeting since the Annual Session.

Mrs. Kruger and Mrs. Adam reported on Auxiliary activities and thanks the Commission members for the Auxiliary's increase in budget. Mrs. Kruger and Mrs. Adam discussed several projects of the Auxiliary including efforts to counter the repeal of the seat belt statute, buckle up babies, colo-rectal screening, fund raising for AMA-ERF, leadership conferences and a possible slide presentation of Auxiliary activities in Nebraska. Mrs. Kruger noted that she and Mrs. Adam will travel to, hopefully, all of the county society auxiliaries for a meeting during this year.

The Commission thanked Mrs. Kruger and Mrs. Adam for their activities and wished them much success and offered any assistance possible to enhance their activities. A member of the Commission suggested that the Auxiliary might care to look into the "feet first" safety program. During this discussion, Mrs. Adam also noted that the National Auxiliary is working on osteoporosis and is encouraging the State Auxiliaries to do so.

Ms. Marilyn Mellor reported on the activities of the Student Chapter (UNMC) and noted that a two-day symposium the Chapter had held on residencies had been a great success. Because of this success, a similar symposium is being planned on a bi-annual basis. Ms. Mellor also discussed a survey of medical students at the University of Nebraska College of Medicine, along with students of other allied health careers, regarding financial aid needs. She stated that over 70% of the persons in these student groups seek financial aid in the form of loans.

The Commission considered the matter of physician manpower/NMA physician membership in Nebraska. The NMA staff presented considerable information concerning the matter of physician manpower and NMA membership. A summary of this report to the Commission follows:

Staff discussed the map of Nebraska which was coded to delineate physician and population loss and gain. It was noted that total physicians in Nebraska in active practice number 2,100 compared to 1,832 in 1980. Also population statistics have stabilized somewhat since 1980. The Commission reviewed the data with a composite of the study statistics which will be distributed to the House at the Fall Session.

The Commission reviewed data which reflected physician distribution in Nebraska by age and by county. The average age of physicians in Nebraska is 47 years, and that has not changed since 1980. There are three counties in Nebraska with an average age of physicians over sixty years.

Data was presented which dealt with population, number of physicians, hospitals and ratios. The trend toward more rural practices is continuing, that population to physician ratios have decreased and that this is the beginning of a new trend. It was noted an article written by Walter McClure indicated that by 1990 there may be a 20-30% surplus of physicians.

Staff discussed the type of practice report and stated that the largest increase in this category since 1980 has been in the area of family practice. The Commission reviewed school of graduation data, and it was noted there has been no significant change in this area. The Commission then reviewed the specialty report which indicated how many of each specialty practice in each county.

A section of the report on residents noted that the University of Nebraska Medical Center and Creighton University programs are increasing slightly, and the Lincoln Family Practice program is remaining at a level position.

A report on membership recruitment indicated this was an effective communication tool and is the key to recruiting members. The Commission feels this activity is having success with its membership efforts.

An NMA officer discussed the expense involved with belonging to the county medical society, NMA and AMA for physicians and noted that even though these dues are tax deductible, it becomes a large expense for physicians. He felt it is important to encourage physicians to pay their NMA dues prior to the end of the year in order to ensure the tax deduction. The Commission felt that the dues statements should be mailed in November rather than December to emphasize this fact.

The Commission believes that recruiting residents is very important and it was noted that this area is not a successful part of the membership recruitment program. It was felt that a concerted effort at recruiting residents should be pursued. Mr. Neff noted that a student chapter at Creighton is being discussed. It was felt that this group would be most effective if organized by students.

During discussion of the physician manpower/NMA membership report, the Commission considered and noted the efforts which have been made by the officers of the Nebraska Medical Association, and the Association staff in the matter of membership recruitment. Personalized letters signed by the President of the Nebraska Medical Association have gone to non-members of the Nebraska Medical Association, new physicians moving into the state, delinquent members of the Nebraska Medical Association, medical students, and house officers. As a result of this effort, 103 new members have been obtained during 1986 and 7 persons have been reinstated into membership. The commission believes that the officers and staff are to be complimented for this excellent effort. It is also hoped that such personalized attention to membership retention and recruitment will be continued.

The Commission next considered the recent formation of a Section on Young Physicians by the American Medical Association. The background for this action by the American Medical Association was reported to the Board of Trustees of the AMA by an ad-hoc committee on young physicians which was chartered by the Board of Trustees in September of 1984. The Board of Trustees then reported to the House of Delegates in Report FF this matter. Report FF of the Board of Trustees is a very excellent report and worth the attention of each Delegate of the Nebraska Medical Association. However, because of the length of the report, it is not being reproduced in full for all members of the House. The report will, however, be provided to the appropriate Reference Committee. I am sure that members of the House of Delegates desiring to read the full report can do this by contacting the Nebraska Medical Association office. The Commission were of the opinion that the action of the American Medical Association in forming an Assembly of Young Physicians was a very appropriate one.

The Board of Directors of the Nebraska Medical Association have informed the Commission on Association Affairs that the Assembly of Young Physicians to be formed by the American Medical Association will meet at the time of the up-coming meeting of the AMA, and that the AMA has suggested that each state would be allowed one delegate and one alternate to the Assembly. In addition, once the Assembly is formed, one delegate position will be granted from the Assembly to the AMA House of Delegates. The Board of Directors were informed that the AMA will fund one of the two persons, either the delegate or the alternate to the young physicians assembly from each state. The Board recommended that the Commission consider whether or not the House of Delegates of the NMA should support funding for the second person. Following discussion by the Commission, the Commission members believe that it would be entirely appropriate for the House of Delegates of the NMA to support this activity and to fund the expenses of the delegate or alternate delegate to the coming meeting of the Assembly for Young Physicians. By this report, the Commission on Association Affairs formally recommends to the House of Delegates that such funding be approved.

There followed considerable discussion among the Commission members, officers of the society and executive staff of the NMA as to whether or not the Nebraska Medical Association should consider similar action at the state level within our organization. The opinion was unanimous that some form of activity should be considered and developed for young physicians. Following further discussion, the Commission decided that the House of Delegates of the Nebraska Medical Association should be formally informed of the action of the American Medical Association in forming an Assembly of Young Physicians. Further, the Commission recommended that some attempt should be made by the Nebraska Medical Association to enhance participation by young physicians in the society, and that if the House approves of such a project that the House empower the President and the Board of Directors of the Nebraska Medical Association to appoint the first delegate and alternate to the AMA's Assembly for Young Physicians and further that the President and Board of Directors be empowered to appoint an ad-hoc committee composed of young practicing physicians within Nebraska to study this matter and report promptly.

It was further believed that this matter was of such great importance that nominations for the ad-hoc committee, if such is approved by the NMA House of Delegates, be obtained from as wide a spectrum of the membership of the society as possible, but within the time constraints necessary to proceed promptly with this matter.

The next item considered by the Commission was a recommendation from the Board of Directors that the Commission consider a By-Law amendment which would provide voting privileges to the ex-officio members of the Board of Directors. Currently, the By-Laws of the NMA specifically provide that the ex-officio members of the Board of Directors are non-voting. The members of the Commission concur with the Board of Directors that the ex-officio members of the Board should be entitled a voting privilege on the Board. During the discussion, it was pointed out that the ex-officio members are active participants in meetings of the Board of Directors and further that it is a standard practice in "Sturgis Standard Code of Parliamentary Procedure" for such ex-officio members to be voting members. A motion was made to recommend to the House of Delegates of the NMA an amendment to the By-Laws which would grant ex-officio members of the Board of Directors a voting privilege and further that this privilege should take effect directly after the Fall Session of the House of Delegates. The motion was seconded and passed, and this action is recommended to the House of Delegates.

The Commission briefly considered the matter of membership benefits derived from the NMA which is a part of its charge. The Commission asked that Mr. Neff and Mr. Schellpeper compile a list of benefits which accrue to physicians because of membership in the AMA and/or the NMA for consideration by the Commission at a future meeting.

REPORT OF THE AD-HOC COMMITTEE ON ATHLETIC MEDICINE

Patrick E. Clare, M.D., Lincoln - Chairman: Stanley M. Bach, M.D., Omaha: Warren Bosley, M.D., Grand Island; S. I. Fuenning, M.D., Lincoln; Jack K. Lewis, M.D., Omaha; Morris B. Mellion, M.D., Omaha; Richard A. Raymond, M.D., O'Neill; Wm. Michael Walsh, M.D., Omaha; George F. Sullivan, R.P.T., Lincoln; Wayne Wagner, A.T.C., Omaha; Richard Hall, Omaha.

The Ad-Hoc Committee on Athletic Medicine has met and discussed the subject of physical examinations for athletes.

It is the recommendation of the Ad-Hoc Committee on Athletic Medicine of the Nebraska Medical Association that for all participating athletes in the junior high and high school level there be a physical examination completed the first year of athletic participation at a given school, and every other year thereafter.

It is also recommended that a generic screen, or form, be filled out annually, signed by the parent and the student, and be provided to the school where it may be evaluated. Any affirmative answers on this form need to be observed and reviewed by responsible school personnel. This student then needs to be evaluated by a physician and cleared before participating.

We would add that there is nothing wrong with an annual physical if the family and/or school wish to have one done before each school year.

The Ad-Hoc Committee submits the above recommendations to the House of Delegates for approval.

REPORT OF THE AD-HOC COMMITTEE ON HEALTH EDUCATION

Warren G. Bosley, M.D., Grand Island - Chairman: Stephen J. Lanspa, M.D., Omaha; Paul H. Phillips, MD., Scottsbluff; Eileen C. Vautravers, M.D., Lincoln; Wesley G. Wilhelm, M.D., Omaha; Gregg F. Wright, M.D., Lincoln; Janet Paisley, Omaha.

Since its last report to the House of Delegates, the Ad-Hoc Committee has continued to work with other organizations in the state concerned with health education. These have included the Nebraska Association of School Boards, the Department of Social Services, the Nebraska Department of Education and the Nebraska State Education Association.

The Committee has reviewed again the financial impact of unwed mothers on the State of Nebraska. The Department of Social Services has developed some educational programs and has planned to conduct workshops. The Department of Education, through the Division of Health Education and Physical Education, has continued to conduct programs on health education in several areas of the state. However, they have discovered that unless educators are enthusiastic and supportive of this concept, information is not well received and few changes occur. It is obvious again that involvement of community agencies, especially those who are working with the Committee, is important, and that coalitions of these groups might be able to develop effective programs.

The Committee urges that programs be developed for school board members, school administration, and faculty to cover the areas of teenage pregnancy and health education generally, probably not developing curriculums in this area, but trying to develop awareness programs for teachers and other school personnel throughout the State of Nebraska. The Committee believes that a few individuals in a given area can function as a very effective catalyst at achieving a wider interest and concern.

The Committee recommends that it continue to work with these organizations in the development of workshops and programs dealing with health education and teenage pregnancy in particular. The cooperation of the Medical Auxiliary is important to this area and their representative assures the Committee that they are eager to cooperate in these efforts. The Committee will work in the next month or two on developing a plan for these programs to be held in sites throughout the state, in cooperation with representatives from the organizations working with the Committee, local physicians and educators. The Committee recommends that the NMA be an active sponsor of these workshops and programs, possibly providing moderate financial support where necessary.

The Committee believes that these organizations, working in concept, can become an effective influence in showing the need for worthwhile health education programs in Nebraska schools, and they look forward to active cooperation with Nebraska School Board Association and Nebraska Education Association particularly. The Committee reqeusts that the House permit this work to continue.

REPORT OF THE COMMISSION ON HOSPITAL MEDICAL STAFF

Steven A Schwid, M.D., Omaha - Chairman: Richard A Hranac, M.D., Kearney; Harry E. Keig, M.D. Papillion; Glen F Lau, M.D., Lincoln; Barney B. Rees, M.D., Omaha; Joseph G Rogers, M.D., Lincoln; Gerald Rounsborg, M.D. North Platte; William A Shiffermiller, M.D., Omaha; Stephen D Torpy, M.D., Omaha.

The Commission has met and has entered into planning discussion with the Nebraska Hospital Association regarding the feasibility of sponsoring a meeting on joint ventures tentatively to be held in late November, 1986. The Commission entertained the possibility of sponsoring a meeting for the general attendance of the NMA Annual Session on matters of mutual concern and that proposal has been carried forth to the President.

Board of Councilors

The Fall Session meeting of the Board of Councilors was held September 25, 1986, at the Cornhusker Hotel, Lincoln, Nebraska.

The following members were present: Drs. Stanley Truhlsen, Howard A. Dinsdale, C. T. Frerichs, Roger Massie, Wm. J. Chleborad, Robert Quick, Floyd Shiffermiller, Stanley Nabity, David Little, Donald Wilkinson, Hiram R. Walker, L. Dwight Cherry, and Francis D. Donahue.

The meeting was called to order by the Chairman, Dr. Truhlsen.

Dr. Truhlsen welcomed the new Councilors present, Dr. Stanley Nabity, Grand Island, and Dr. Donald Wilkinson, Alliance.

Election of the Chairman of the Board of Councilors was called for. Dr. Truhlsen was nominated. There being no further nominations, Dr. Truhlsen was elected by a unanimous ballot.

Election of the Secretary of the Board of Councilors was called for. Dr. Quick was nominated. There being no further nominations, Dr. Quick was elected by unanimous ballot.

Approval of the minutes of the Annual Session was called for, and these were approved as printed in the July, 1986, issue of the Nebraska Medical Journal.

The Board of Councilors reviewed the reports and resolutions contained in the Handbook, and these were accepted and recommended to the House of Delegates for their consideration.

The request for Life Membership and the listing of the 1987 Fifty-Year Practitioners were reviewed by the Board of Councilors. These were approved by the Councilors, and recommended to the House of Delegates for their consideration.

Mr. Neff gave a progress report on the membership recruitment program which was initiated in 1985.

There being no further business, the meeting was adjourned.

House of Delegates

FIRST SESSION

The first session of the Fall Session House of Delegates was held on September 26, 1986, at the Cornhusker Hotel, Lincoln, Nebraska.

Roll call showed 81 delegates present, and the meeting was declared in session. The meeting was called to order by the Speaker, Dr. Armstrong.

Dr. Armstrong called for approval of the minutes of the Annual Session meeting of the House of Delegates, and these were approved as printed in the July, 1986 issue of the Nebraska Medical Journal.

The following oral reports were presented:

Dick Borchert, Iowa Blue Shield, Medicare Part B Carrier
Mr. Joe Williams, Survey Consultant, Re: NMA-NFMC/PRO Survey
Dr. Harry W. McFadden was recognized by the House for his many years as Vice Speaker and Speaker of the House of Delegates
Dr. John D. Coe, Medical Director, Nebraska Foundation for Medical Care
Dr. Gregg Wright, Director, State Department of Health
Dr. Robert Waldman, Dean, University of Nebraska College of Medicine
Denise Bogard, NMA-MSC of the University of Nebraska Medical Center

The Following Reference Committee assignments were made:

REFERENCE COMMITTEE #1
- Report of the Board of Directors, Items 1, 2, 5, 10, 15 and Charts and Data
- Report of the Delegate to AMA, Items 1, 2, and 5
- Resolution #2 - Metro Omaha - Medicare Payments by Iowa Blue Cross/Blue Shield
- Resolution #3 - Metro Omaha - Medicare Reimbursement
- Resolution #6 - Metro Omaha - Relative Value Studies
- Resolution #7 - Metro Omaha - Third Party Interference

REFERENCE COMMITTEE #2
- Report of the Board of Directors, Items, 3, 6, 8, 11, and 12
- Report of the Delegate to AMA, Items 10 and 11
- Life Membership requests and Fifty-Year Practitioners
- Report of the Ad-Hoc Committee on Athletic Medicine
- Report of the Commission on Association Affairs
- Resolution #8 - Washington-Burt County - Licensure of Radiologic Technologists

REFERENCE COMMITTEE #3
- Report of the Board of Directors, Item 4
- Final Report of the Survey
- Report of the Committee on Health Planning
- Resolution #9 - Hall County - PRO

REFERENCE COMMITTEE #4
- Report of the Board of Directors, Items 7 and 16
- Report of the Delegate to AMA, Items 3, 4, and 5
- Report of the Ad-Hoc Committee on Health Policy Statements
- Report of the Commission on Hospital Medical Staff
- Resolution #1 - Lancaster County - Officer Immunity

REFERENCE COMMITTEE #5
- Report of the Board of Directors, Items 9 and 14
- Report of the Nebraska Department of Health
- Report of the Commission on Legislation & Governmental Affairs
- Report of the Commission on Public Affairs
- Resolution #4 - Metro Omaha - Mandatory Helmets for Motorcyclists
- Resolution #5 - Lancaster County - Motorcycle Safety in Nebraska

REFERENCE COMMITTTEE #6
- Report of the Board of Directors, Item 13
- Report of the Delegate to AMA, Items 7, 8, and 9
- Report of the University of Nebraska College of Medicine
- Report of the Commission on Medical Education
- Report of the Ad-Hoc Committee on Scientific Sessions
- Report of the Ad-Hoc Committee on Health Education

Following announcements, the House was recessed until Saturday morning.

House of Delegates

SECOND SESSION

The second session of the House of Delegates was held September 27, 1986, at the Cornhusker Hotel, Lincoln, Nebraska.

Roll call showed 66 delegates present, and the meeting was declared in session. The meeting was called to order by the Vice Speaker, Dr. Meissner.

Dr. Meissner called for approval of the minutes of the first session, and those were approved as printed.

Reports of the Reference Committees were presented as follows:

Reference Committee #1

(1) REPORT OF THE BOARD OF DIRECTORS, ITEM 1

The Board of Directors Report, Item 1, refers to a Board proposal to the House of Delegates for a $20 dues increase with an implementation date of January 1, 1987. This would raise the Association dues to $285 per year. Discussion revealed that there have been increased expenses to the Association from new activities in the past year. These included the institution of a Commission on Hospital Medical Staff Section and funding student members to the AMA meetings. Background information supplied to the Reference Committee indicated that over the past six years there has been a deficit in each of the last five years. The deficit in 1985 was $22,752. This increase in dues would eliminate the accrued deficit balance and provide a small amount of additional income in the ensuing years. There was no opposition to this recommendation.

RECOMMENDATION:

There be a $20 dues increase implemented as of January 1, 1987, thereby raising the yearly Association dues to $285.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE BOARD OF DIRECTORS, ITEM 2

The Board of Directors Report, Item 2, refers to an action by the Board of Directors which has established an ad-hoc committee to meet with Ms. Gina Dunning's committee on provision of care to Medicaid recipients. The discussion revealed that Dr. Craig Urbauer is Chairman of this ad-hoc committee and Dr. Dale Ebers is the representative for the Department of Social Services. To date, approximately eight concerns have been submitted to this committee for their discussion.

RECOMMENDATION:

The membership should be made aware of the existence of the ad-hoc committee including the methodology to be used to acquaint the committee of concerns of the membership regarding Medicaid.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE BOARD OF DIRECTORS, ITEM 5

The Board of Directors, Item 5, relates to the recommendation of a five-year graduated dues structure for new physicians. This action was directed by the House in order to increase membership of younger physicians in the Nebraska Medical Association. The Board also recommended that county medical societies implement a similar action. This proposal was developed by the younger physicians via a survey. Discussion also revealed that the $20 dues increase would also apply to the graduated dues structure. This would then change the stated figures in the Board of Directors Report which do not reflect the $20 increase. This recommendation had no opposition.

RECOMMENDATIONS:

1. The five-year graduated dues structure for new physicians as presented in the Report of the Board of Directors be adopted.

2. The county medical societies implement a similar five-year graduated dues structure for new physicians.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE BOARD OF DIRECTORS, ITEM 10

RESOLUTION #2 - METRO OMAHA - MEDICARE PAYMENTS BY IOWA BLUE CROSS/BLUE SHIELD

Report of the Board of Directors, Item 10 and Resolution #2 relate to communication with the Iowa Blue Cross/Blue Shield Medicare carrier and difficulties arising from the Medicare payments from this current Medicare intermediary. This item invoked considerable discussion. It was a concensus of the discussants present that the names, addresses, and titles of the individuals who were asked to speak to the House of Delegates should be disseminated to the House of Delegates. It was also felt that information on obtaining the HCFA billing manual that is available for doctors' offices, and the addresses for inquiries, be disseminated to the membership. It was felt that some members may not realize that there is the existence of a HCFA billing manual and steps on how to obtain this manual should be disseminated to the entire membership. It was also felt that the list of telephone numbers that is going to be provided to the Nebraska Medical Association should be disseminated to the membership. Discussants felt that continued communication with the Medicare intermediary should continue. Information regarding electronic transfer of claim data should also be investigated and this information disseminated to the membership. One of the discussants provided an article from the Lincoln Star as well as articles from previous newspapers regarding difficulty with the Blue Cross/Blue Shield of Iowa handling of Nebraska claims for Medicare.

This resolution #2 reads as follows:

> WHEREAS, Medicare reimbursement for Nebraska physician services is processed by Iowa Blue Cross/Blue Shield, which follows the guidelines of the Iowa Foundation for Medical Care, and
>
> WHEREAS, major problems in processing the claims and providing adequate compensation are **continuing** to cause significant problems for Nebraska physicians and for Medicare patients;
>
> THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association direct its leadership and executive director to develop a procedure to document the problems, to set up educational programs for doctors and staff, and to develop an effective working liaison with the Medicare carrier.

Resolution #2 asked for the Nebraska Medical Association to develop procedures to document the problems and to set up educational programs for doctors and staff as well as develop an effective working liaison with the Medicare carrier.

Discussion also ensued around the presentation of the Iowa Blue Cross/Blue Shield representatives at the House of Delegates. It was felt that a transcript of the taped discussion that ensued at the House of Delegates should be prepared. It is felt that an ad-hoc committee, to serve as a liaison between the Nebraska Medical Association and the Iowa Blue Cross/Blue Shield to monitor the difficulties that have occurred with the Medicare payments, be established. This ad-hoc committee should receive the transcript of the morning presentation by Iowa Blue Cross/Blue Shield as well as other information submitted to the Reference Committee regarding problems in the Medicare payment system. This would serve as a basis to monitor future activities.

RECOMMENDATION:

An ad-hoc committee be established to serve as a liaison between the Nebraska Medical Association and the current Medicare intermediary (Iowa Blue Cross/Blue Shield) and monitor the problems that occur with Medicare payments.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was seconded. Dr. Gogela moved to amend the resolution by expressing the appreciation of the Nebraska Medical Association to our Congressional delegation for their help in Washington, D.C. This amendment was adopted by the House, and this section of the Reference Committee report was adopted as amended.

(5) REPORT OF THE BOARD OF DIRECTORS, ITEM 15

The Board of Directors Report, Item 15 refers to the establishment of an ad-hoc committee to review sources for outside income for the Nebraska Medical Association. This ad-hoc committee consists of Drs. Shapiro, Collicott and Cherry. There was no opposition to the establishment of this committee and full support was given by the discussants present.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) REPORT OF THE DELEGATE TO THE AMA, ITEM 1

The Report of the Delegate to the AMA, Item 1 referred to the AMA finances including the allowance of physicians under the age of 70 who retire to retain their AMA membership at 20% of the regular AMA dues structure. There was no opposition to this report.

RECOMMENDATION:

Report of the Delegate to AMA, Item 1 be accepted for information.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(7) REPORT OF THE DELEGATE TO AMA, ITEM 2

This report regarded Nebraska Resolution #29 introduced by the Nebraska delegation to the AMA. This pertained to the unfairness of current financing of Medicare. There was no opposition to this report.

RECOMMENDATION:

Item 2 of the Delegate to the AMA's Report be accepted for information.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(8) REPORT OF THE DELEGATE TO AMA, ITEM 6

This portion of the report related to competition amongst physicians. There was no opposition to this report.

RECOMMENDATION:

Report of the AMA Delegate, Item 6 be accepted for information.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(9) RESOLUTION #3 - METRO OMAHA - MEDICARE REIMBURSEMENT

This resolution reads as follows:

WHEREAS, the federal government professes to desire the best quality of medical care for senior citizens through the Medicare program, and

WHEREAS, government reimbursement policies seem to have just the opposite intent, and

WHEREAS, in no other federal program are recipients required to accept such small percentage of reimbursement for goods and services they purchase, and

WHEREAS, the federal government has frozen Medicare reimbursement at a low level since July 1, 1984, despite increases in the cost of providing medical services, most notably professional liability insurance, and

WHEREAS, services cannot indefinitely be provided at less than cost;

THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association urge the American Medical Association to use all appropriate means, including court action if necessary, to end blatant discrimination against senior citizens and the medical profession under Medicare, and

BE IT FURTHER RESOLVED, that the Nebraska Medical Association further urge the American Medical Association to counsel with senior citizen organizations about discrimination which occurs under Medicare and educate the public to the fact that the cost of medical practice continues to rise while fees are frozen.

Only a small amount of discussion revolved around this resolution. It was noted that the AMA at the present time does consult with the American Association of Retired Persons in regard to Medicare services.

RECOMMENDATIONS:

1. That the first resolved of Resolution #3 be adopted which reads, "Therefore, be it resolved, that the Nebraska Medical Association urge the American Medical Association to use all appropriate means, including court action if necessary, to end blatant discrimination against senior citizens and the medical profession under Medicare."

2. The second resolve be adopted, as amended, as follows, "Be it further resolved that the Nebraska Medical Association further urge the American Medical Associa-

tion to continue to consult with senior citizens organizations about discrimination which occurs under Medicare and educate the public as to the fact that the cost of medical practice continues to rise while fees are frozen.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(10) RESOLUTION #6 - METRO OMAHA - RELATIVE VALUE SCHEDULES

This resolution reads as follows:

WHEREAS, the American Medical Association, Harvard University and Health Care Financing Administration (HCFA) are currently involved in a study of Relative Value Scales (RVS) as directed by Congress, and

WHEREAS, HCFA has recently indicated its intention of arbitrarily reducing medical payments for selected ophthalmic surgery without the benefit of this Harvard-AMA study, and

WHEREAS, such arbitrary limitations unequally penalize the physicians of Nebraska and other regions who have historically shown fee increase restraint and are now subjected to frozen Medicare profiles for several years in spite of increasing costs including the cost of medical liability insurance, and

WHEREAS, the specification by HCFA of individual procedures for arbitrary limitation or reduction in fee payment makes no provisions for compensatory changes in those procedures for which profiles are woefully inadequate such as office visits and consultations such as would occur in comprehensive RVS review; therefore.

BE IT RESOLVED, that the NMA oppose these current arbitrary activities on the part of the HCFA, and

BE IT FURTHER RESOLVED, that the Nebraska Congressional Delegation be notified of this position.

Considerable discussion revolved around Resolution #6 pertaining to relative value study project that is being conducted by the American Medical Association, Harvard University and the Health Care Financing Administration. There was general agreement about the inherent unfairness of arbitrary limitations being imposed by HCFA with individual selectivity of procedures and services being selected for price reductions prior to the completion of a relative value study. The intent of this resolution is to confer to the Nebraska congressional delegation the opposition of the Nebraska Medical Association to these current arbitrary activities on the part of HCFA.

RECOMMENDATIONS:

1. Be it resolved that the Nebraska Medical Association oppose the current arbitrary activities on the part of HCFA of selecting specific procedures or services for fee reduction before completion of the American Medical Association, Harvard and HCFA RVS study, and

2. Be it further resolved that the Nebraska congressional delegation be notified of this position.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(11) RESOLUTION #7 - METRO OMAHA - THIRD PARTY INTERFERENCE

This resolution reads as follows:

WHEREAS, there has been much discussion regarding the recent Blue Cross-Blue Shield contract with the University of Nebraska Medical Center, and

WHEREAS, physicians are concerned that certain requirements of third party payers inappropriately interfere with the physician patient relationship, and

WHEREAS, these requirements may be interpreted as dictating where, how and under what conditions medicine is to be practiced by physicians; therefore

BE IT RESOLVED, that the Nebraska Medical Association develop a policy statement defining our professional opinion on policies and practices of third party carriers and report back to the House at the 1987 Annual Session.

The intent of this resolution is for the Nebraska Medical Association to develop a policy statement on the policy and practices of third-party carriers. The discussants expressed a concern with the possibility of current activities of the third-party carriers producing a rationing of health care and of producing cost shifting. This discussion emphasized that this was not a condemnation of either Blue Cross-Blue Shield of Nebraska or the University of Nebraska Medical Center regarding recent policy contracts. It was felt that patients need to be educated as to the provisions of their health care policies.

RECOMMENDATION:

Be it resolved that the Nebraska Medical Association study the policies and practices of third-party carriers and develop a policy statement defining our professional opinion on these policies and practices for consideration by the House of Delegates at the 1987 Annual Session.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER I MOVE THE ADOPTION OF THE REPORT OF REFERENCE COMMITTEE #1 AS A WHOLE AS AMENDED. This was adopted by the House.

Respectfully submitted,
Blaine Y. Roffman, M.D.,
Omaha, - Chairman
A. H. Bergman, M.D.,
Fremont
M. Jack Mathews, M.D.,
Lincoln

Reference Committee #2

Reference Committee #2 considered five reports and one resolution. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE BOARD OF DIRECTORS, ITEMS 3, 6, 8, 11 and 12

Items 3, 6, 11, and 12 were discussed and no negative comments were heard. Financial support was recommended for the Advocacy Committee. It was also felt essential that a new pamphlet be developed to describe membership benefits of the NMA.

Item 8 - As the Executive Director was unsuccessful in obtaining additional information regarding surgical reimbursement problems, Item 8 was accepted for information only.

The Committee recommends acceptance of these sections of the Report of the Board of Directors.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE DELEGATE TO AMA, ITEMS 10 and 11

The Reference Committee discussed Items 10 and 11. The comments were favorable.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) LIFE MEMBERSHIP REQUESTS AND FIFTY-YEAR PRACTITIONERS

These are as follows:

Life Membership
L. Thomas Hood, M.D., Omaha

Fifty-Year Practitioners
Holt & Northwest
  Harold J. Panzer, M.D., Ainsworth
Lancaster County
  Maurice D. Frazer, M.D., Lincoln
  Richard W. Gray, M.D., Lincoln
  Leteer G. H. Lewis, M.D., LaPorte, Minn.
  Paul D. Marx, M.D., Lincoln
  Samuel T. Thierstein, M.D., Lincoln
Madison County
  Willard Brinegar, M.D., Norfolk
  Charles G. Ingham, M.D., Wayne
Metropolitan Omaha
  John A. Aita, M.D., Omaha
  Alister I. Finlayson, M.D., Omaha
  Joseph M. Horwich, M.D., Omaha
  Joseph A. Longo, Sr., M.D., Omaha
  Harry H. McCarthy, M.D., Omaha
  Ralph C. Moore, M.D., Omaha
  John M. Thomas, M.D., Glenwood, Ia.
Scotts Bluff County
  Joe T. Hanna, M.D., Scottsbluff

The Life Membership requests were reviewed by the Committee. There was no negative discussion.

MR. SPEAKER, I MOVE THE REQUEST FOR LIFE MEMBERSHIP AND FIFTY-YEAR PRACTITIONERS BE ACCEPTED. This was adopted by the House.

(4) REPORT OF THE AD-HOC COMMITTEE ON ATHLETIC MEDICINE

There was a fairly lengthy discussion about the for frequent or multipe preparticipation screening examinations for high school sponsored activities. While we recognize that the proposal by the Committee on Athletic Medicine cannot constitute a law or rule, the report was accepted. The Reference Committee recommends that the proposal be forwarded to the Nebraska School Activities Association for its consideration.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) REPORT OF THE COMMISSION ON ASSOCIATION AFFAIRS

In the Committee discussion, the efforts by the Nebraska Medical Auxiliary was reviewed and praised. The importance of student and resident participation in organized medical activities was also emphasized and encouraged.

The final item considered was a recommendation that there be a By-Law amendment which would permit the ex-officio members of the Board of Directors to vote.

> CHAPTER IX, Section 5 (5)
> Be an ex-officio member of the Board of Directors and Board of Councilors, with the privilege of the floor, ~~but without the right to vote~~
>
> CHAPTER X, Section 1
> The Board of Directors shall be ten (10) in number composed as follows: The President, President-Elect, Immediate Past President, Secretary-Treasurer, three members-at-large and three ex-officio members with~~out~~ voting privileges, being the Speaker and Vice Speaker of the House of Delegates and the Chairman of the Board of Councilors.

We propose that the amendment to the By-Laws be voted upon at this time and that the amendment be immediately activated at the conclusion of this session of the House of Delegates.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) RESOLUTION #8 - WASHINGTON-BURT COUNTY - LICENSURE OF RADIOLOGIC TECHNOLOGISTS

This resolution reads as follows:

> WHEREAS, there is a movement afoot to require Nebraska hospitals and physicians' offices to employ only registered or certified x-ray technologists, and
>
> WHEREAS, the availability of such individuals with the proposed proper certifications to hospitals and physicians' offices in many areas of rural Nebraska is non-existent, and
>
> WHEREAS, the enactment of such restrictions would restrict radiological services in many rural areas and/or greatly increase the cost of such services;
>
> THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association affirm a position that the primary responsibility for determining the qualifications of radiological technicians should be in the hands of the radiologist in charge of that particular hospital service. The Nebraska Medical Association supports certification and high levels of training in all fields, but at the same time recognizes that lack of manpower in rural areas dictates that locally trained individuals may sometimes be used in this capacity, often as coworkers with a certified x-ray technologist for the purpose of providing round-the-clock coverage.

The resolution was discussed with members of the Washington-Burt County Medical Society. In the resolution it is recommended that in the first sentence of the THEREFORE, BE IT RESOLVED, that the word "radiologist" be changed to "physician" and the word "hospital" be removed. This would then read, "THEREFORE, BE IT RESOLVED, that the Nebraska Medical Association affirm a position that the primary responsibility for determining the qualifications of radiological technicians should be in the hands of the physician in charge of that particular service . . . "

The Board of Directors is urged to participate actively in the LB 407 process hearing when the radiologic licensure proposals are presented.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS

SECTION OF OUR REPORT. This was seconded. Discussion followed on the LB 407 process, and physicians were urged to contact their Senators regarding this. Dr. Dunlap told the House that the material that was handed out at the Thursday Legislative Seminar would be of benefit to physicians in contacting their Senators and those who testify before a Legislative Committee. This section of the Reference Committee report was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF THE REFERENCE COMMITTEE #2 AS A WHOLE.

Respectfully submitted,
David Dyke, M.D.,
Lincoln - Chairman
Fred Gawecki, M.D., Papillion
Stanley Nabity, M.D.,
Grand Island

Reference Committee #3

Reference Committee #3 considered three reports and one resolution. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE BOARD OF DIRECTORS, ITEM 4

Your Reference Committee heard a modest amount of discussion concerning this item and heard no objections to the Board's voting to withdraw cross-over representation of the NMA to the NFMC/PRO Board of Directors. Your Reference Committee recommends endorsement of the Board of Directors' action.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) FINAL REPORT OF THE SURVEY DEALING WITH NEBRASKA PHYSICIANS' APPRAISAL OF NMA/NFMC RELATIONSHIP

Your Reference Committee heard considerable discussion concerning the composition and nature of this report. We recommend acceptance of the report of the survey as an informational item.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE COMMITTEE ON HEALTH PLANNING

Your Reference Committee has received this report as an informational item noting that the report does not call for any specific action. Additional information was received from Dr. Cornelius dealing with the financing of health planning as done by governmental agencies. It would appear that the current financial restraints placed upon the federal and state governments are such that health planning in the future will more likely revert to its former status, that is planning in response to specific inputs by outside factors rather than being governmentally generated. We would like to commend Dr. Cornelius on the extraordinary amount of time and energy which he has expended and displayed along these lines.

Your Committee recommends your acceptance of the Report of the Committee on Health Planning as an informational item.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) RESOLUTION #9 - HALL COUNTY - PRO

This resolution reads as follows:

WHEREAS, PRO has been developing over the past two years, and

WHEREAS, problems initially associated with PRO appear to be resolving, and

WHEREAS, there is some reason to believe Iowa PRO may not be the best alternative, and

WHEREAS, Kansas PRO has been approved for continuing activity;

THEREFORE, BE IT RESOLVED, the Nebraska Medical Association support a continuing relationship with the Kansas PRO.

Your Reference Committee recognizes that this resolution together with its intent has been superceded by the events of time and accordingly is an inappropriate resolution at this time, consequently, we recommend no action on the resolution.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was seconded. It was pointed out that some action should be recommended on this resolution rather than no action. Dr. Dunlap said the Committee would recommend that this reoslution not be adopted. This section of the Reference Committee Report was adopted as amended.

MR. SPEAKER, I MOVE THE ADOPTION OF THE REPORT OF REFERENCE COMMITTEE #3 AS A WHOLE AS AMENDED. This was adopted by the House.

James H. Dunlap, M.D.,
Norfolk - Chairman
Richard Svehla, M.D., Omaha
George Voigtlander, M.D.,
Pawnee City

Reference Committee #4

Reference Committee #4 considered four reports and one reoslution. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE BOARD OF DIRECTORS, ITEMS 7 and 16

It is the recommendation of this Committee that Item 7 of this report be accepted as submitted. It is the recommendation of this Committee that Item 16 be accepted with the comment that the physician numbers listed for Douglas County (1,045) do not include the number of House Officers (440) so as to clarify this in the Nebraska Physician Facts, July, 1986, brochure.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE DELEGATE TO AMA, ITEMS 3, 4, and 5

Mr. Speaker, it is the recommendation of this Committee that these items from this report be accepted as written.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE AD-HOC COMMITTEE ON HEALTH POLICY STATEMENTS

Mr. Speaker, this Committee wishes to commend Dr. Retelsdorf and his Ad-Hoc Committee for their development of this fine health policy statement on Primary Care.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) RESOLUTION #1 - LANCASTER COUNTY MEDICAL SOCIETY - OFFICER IMMUNITY

This resolution reads as follows:

> WHEREAS, the services of not-for-profit Boards are important to the efficient conducting of management of public and charitable affairs of the citizens of the State of Nebraska, and
>
> WHEREAS, officers of such not-for-profit Boards must be permitted to operate without undue concern for the possibilities of litigation arising from the discharge of their duties as policymakers;
>
> THEREFORE, BE IT RESOLVED, that the Board of Directors of the Nebraska Medical Association assign to the appropriate Commission or Committee the responsiblity to explore the advisability of developing legislation granting immunity from suits to directors, trustees, or members of governing bodies of not-for-profit corporations and associations.

Much discussion was held pursuant to this resolution between Mr. P. D. Duensing, Executive Secretary of the Lancaster County Medical Society, the Committee members, and other NMA members present. The necessity of being able to acquire liability coverage for the non-profit organizations boards of directors was made very apparent. If acquisition of such liability coverage continues to be unavailable, many non-profit public and charitable organizations would be in jeopardy of having to cease functioning. For example, such organizations included could be the Boy Scouts of America, Babe Ruth baseball, hospital boards and county medical societies, to name a few.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT AND TO REQUEST THAT THIS RESOLUTION BE REFERRED TO THE COMMISSION ON LEGISLATION AND GOVERNMENTAL AFFAIRS. This was adopted by the House.

(5) REPORT OF THE COMMISSION ON HOSPITAL MEDICAL STAFF

Mr. Speaker, we accept this report without comment.

MR. SPEAKER, I MOVE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER, I MOVE ADOPTION OF THE REPORT OF REFERENCE COMMITTEE #4 AS A WHOLE. I wish to thank Jon Hinrichs and John Griffiths, who so ably assisted me. This was adopted by the House.

Respectfully submitted,
R. P. Massie, M.D.,
Plainview - Chairman
Jon Hinrichs, M.D., Lincoln
John Griffiths, M.D., Omaha

Reference Committee #5

Your Reference Committee considered four reports and two resolutions. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE BOARD OF DIRECTORS, ITEMS 9 and 14

RECOMMENDATIONS:

1. Your Reference Committee accepted Item 9 as written.

2. Your Reference Committee accepted Item 14 as written with the Reference Committee's comment that we urge the concept of this paragraph and wish it to be implemented rapidly.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE STATE HEALTH DEPARTMENT

Your Reference Committee accepted this report as written.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE COMMISSION ON LEGISLATION AND GOVERNMENTAL AFFAIRS

Your Reference Committee accepted this report as written. It is suggested that the members who are interested in the Agenda of the Legislature's Committees, get the weekly bulletin by checking with the Clerk of the Legislature. The whole object is to get more people involved - especially with the key issues.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE COMMISSION ON PUBLIC AFFAIRS

Your Reference Committee accepted this report as written, and the Committee wants to commend the groups that have been working towards this program on the good job they have done thus far.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) RESOLUTION #4 - METRO OMAHA - MANDATORY HELMETS FOR MOTORCYCLISTS

RESOLUTION #5 - LANCASTER COUNTY - MOTORCYCLE SAFETY IN NEBRASKA

These resolutions read as follows:

Resolution #4

> WHEREAS, over the period 1977-1984, within the city limits of Omaha, 57 motorcyclists were killed, 51 of whom were wearing no helmet;
>
> THEREFORE, BE IT RESOLVED, the Nebraska Medical Association support a mandatory helmet law.

RECOMMENDATIONS:

It is recommended that the Board of Directors suggestions concerning the Annual Session be carried out and that the specialty societies meet on Saturday and Friday if necessary. The House of Delegates shall convene on Sunday and twice on Tuesday morning, with Sportsman's Day being held on Monday, and the awards dinner being held in conjunction with Fun Night as a combined function.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS

SECTION OF OUR REPORT. This was adopted by the House.

(2) REPORT OF THE DELEGATE TO AMA, ITEMS 7, 8, and 9

There was no discussion on these items. Item 7 dealt with the advertising of alcoholic beverages, Item 8 with DPT vaccines, and #9 with the public awareness campaign. It seemed to the Reference Committee that the marked rise in the price of diptheria, pertussis and tetanus vaccine has reached crisis proportions.

RECOMMENDATION:

These items in the Report of the Delegate to the AMA are accepted for informational purposes.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(3) REPORT OF THE UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE

There was extensive discussion of this report. The changes of the anatomy program were discussed. Those people discussing the matter were of the opinion that the changes in the method of teaching had mixed reviews, and probably the changes were in line with current methodology in increasing the student's clinical experience. It was also agreed that in any area of transition there is always some discomfort with the change. It was stressed by members of the audience that there is a very deep concern for the change in the Department of Psychiatry at the UNMC. It was brought to the attention of the Reference Committee that the Department of Psychiatry has become essentially non-existent. It was felt, that as a result of the marked decrease in the emphasis on psychiatry, that student and resident training suffered markedly. The changes in the Department of Psychiatry apparently results from lack of funding.

RECOMMENDATIONS:

1. The University of Nebraska College of Medicine be commended in upgrading its staff.

2. Changes the University of Nebraska College of Medicine is seeking to make in its anatomy courses should have our support.

3. The decline in the size and scope of the Department of Psychiatry should be a concern for physicians throughout the state.

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(4) REPORT OF THE COMMISSION ON MEDICAL EDUCATION

The Commission on Medical Education has sent surveyors to evaluate the medical education programs at six different institutions. The current status of these institutions has apparently not been determined.

RECOMMENDATION:

This report is accepted for informational purposes.

MR. SPEAKER, I MOVE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(5) REPORT OF THE AD-HOC COMMITTEE ON SCIENTIFIC SESSIONS

The substance of the report essentially followed the report of the Board of Directors concerning the Annual Session. The dates of the Annual Session have been set for April 24-28, 1987. The schedule of events is essentially as outlined in the Board of Directors report.

RECOMMENDATION:

Your Reference Committee recommends that this report of the Scientific Sessions Committee be accepted intact and approved.

MR. SPEAKER, I MOVE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

(6) REPORT OF THE AD-HOC COMMITTEE ON HEALTH EDUCATION

Little discussion was heard on this report. The report's major concern is dealing with problems of teenage pregnancy in Nebraska. The major suggestion made by the report is development of awareness programs for teachers and other school personnel throughout the State of Nebraska. The cooperation of the NMA Auxiliary is essential for carrying out this work. The members of the Reference Committee suggested that consideration be given to working with national programs dealing with the problem of teenage pregnancy.

RECOMMENDATION:

The Ad-Hoc Committee on Health Education should be commended for their continuing work in this important field.

MR. SPEAKER, I MOVE ADOPTION OF THIS SECTION OF OUR REPORT. It was adopted by the House.

MR. SPEAKER, I MOVE THE ADOPTION OF YOUR REFERENCE COMMITTEE #6 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
Thomas Wallace, M.D.,
Gordon - Chairman
Deepak Gangahar, M.D.,
Lincoln
William Rumbolz, M.D.,
Omaha

There was discussion regarding the DPT vaccine, its increased cost and the lack of funds available for the program. It was thought that there are things that can be done at the state and also at the national level. Dr. Cornelius moved that the Board of Directors be asked to investigate this and if necessary, set up an ad-hoc committee to develop strategies for dealing with this DPT crisis. This was approved by the House.

Following an Executive Session of the House, the meeting was adjourned.

Resolution #5

WHEREAS, statistics acquired from the Nebraska office of Highway Safety in Nebraska indicate since 1982 there have been 126 motorcycle fatalities, and the majority of these deaths involved known head injuries and also neck and spinal cord injuries, and

WHEREAS, these same statistics indicate that for the years 1980-1985 inclusive there were 8,084 injuries (including fatalities) resulting from motorcycle accidents, and

WHEREAS, these fatalities and injuries create a significant amount of medical, insurance and law enforcement costs and also losses in income, productivity and tax revenues;

THEREFORE, BE IT RESOLVED, that the Board of Directors of the Nebraska Medical Association assign to the appropriate Commission or Committee the responsibility to explore the advisability of developing legislation requiring occupants of moving motorcycles to wear head helmets.

Because of the content of the two resolutions being similar, the Reference Committee combined the two for simplicity - with these comments:

a. To get more statistics, i.e., not only deaths, but morbidity and quality of life after accidents

b. Add all-terrain vehicles to the resolutions as well as motorcycles

MR. SPEAKER, I MOVE THE ADOPTION OF THIS SECTION OF OUR REPORT. This was adopted by the House.

MR. SPEAKER I MOVE THE ADOPTION OF THE REPORT OF YOUR REFERENCE COMMITEE #5 AS A WHOLE. This was adopted by the House.

Respectfully submitted,
W. A. Doering, M.D.,
Franklin - Chairman
John Fitzgibbons, M.D.,
Omaha
Myron Samuelson, M.D.,
Wymore

Reference Committee #6

Reference Committee #6 considered six reports. The Reference Committee submits the following report and recommendations.

(1) REPORT OF THE BOARD OF DIRECTORS, ITEM 13

Discussion of the Annual Session concerning Sportsman's Day activities centered on the fact that turnout was so poor that eventually a country club would not be found to hold this function if the number of participants did not improve. For this reason a change in scheduling has been considered. The thought of having the final two sessions of the House of Delegates on Tuesday morning was also addressed. It was felt by the discussants that the arrangement holds the delegates hostage until Tuesday morning. It was also brought out that this arrangement for the Annual Session was tentatively on a trial basis, and no arrangement would be satisfactory for all members of the NMA.

AMA News Notes

AMA lobbyists continue to monitor appointments to the House-Senate Biomedical Ethics Advisory Committee. The AMA has made three physician committee member recommendations.

Appointments probably will not be made until the beginning of the 100th Congress in January. There are suggestions that personal philosophy is beginning to play a role in the selection process, and the AMA has expressed concern that members be chosen with professional skill and training in mind.

* * *

A new booklet reviewing the status of Medicare's Prospective Pricing System (PPS) has been distributed to members of the federation by the AMA Dept. of Health Care Financing. The publication, "Medicare's Prospective Pricing System: A Review and Update for Physicians," was developed by the AMA in response to information needs identified by the AMA's Diagnosis-Related Groups (DRG) Monitoring Project. It clarifies a number of key PPS-related issues, including: Medicare discharge policies, Medicare transfer policies, transition of PPS payment rates, and physician DRGS.

* * *

AMA membership is approaching the 280,000 mark and is running ahead of projected 1986 goals in all three dues-paying categories. As of late October, the AMA had 168,307 regular members, up 4,195 from a year earlier. There was a 2,991 increase in housestaff members, to 36,171, with medical student members up 2,786, to 34,293. Dues-exempt membership totaled 39,696.

A major factor in increased membership has been the addition of more than 3,000 regular members from the newly unified states medical societies in Virginia, Mississippi, and Kansas.

* * *

A broad, bipartisan cross section of congressional candidates received approximately $4.5 million in contributions, from the American Medical Political Action Committee in this election cycle. Of that, nearly $1.5 million was devoted to independent expenditures in behalf of candidates known to be supporters of medicine, or on behalf of challengers to incumbents known to be antagonistic to medicine. The latter represented a new approach — a positive campaign aimed at offering name recognition to candidates challenging well-known incumbents.

* * *

The special needs of the elderly should be considered in all medical education programs, James H. Sammons, M.D., AMA executive vice president, said in a letter to T. Franklin Williams, M.D., director of the National Institute on Aging in Bethesda, Md. "We are concerned that any further reductions in Mediciare graduate medical education funding could seriously jeopardize the training of an adequate supply of physicians for all patients, including the elderly," he said.

By the year 2020, more than 50 million Americans will be 65 or older (25 million in 1980), and 7.3 million will be 85 or older (2.3 million in 1980). Dr. Sammons asked that AMA views be considered in the development of recommendations for Congress by the National Institutes of Health.

* * *

Child injury represents a greater threat to productive life than the combined threat of cancer and heart disease, the AMA told President Reagan. In a letter to the President, the AMA's Dr. Sammons urged him to sign the Child Injury Prevention Act of 1986. Dr. Sammons called the legislation "particularly important, as it demonstrates a federal commitment to attack injuries in the same manner as we work together to fight other medical problems, such as heart disease or cancer. Studies show that injury causes half of all deaths for children less than one year, and more than two-thirds of deaths for children less than 16."

* * *

The Nebraska Medical Journal

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ALAN D. FORKER, M.D.
Editor

KENNETH NEFF
Business Manager

NORFOLK PRTG. CO., NORFOLK, NEBR.

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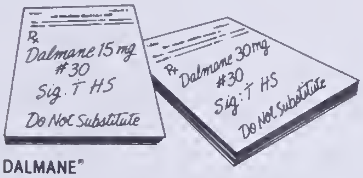
References: **1.** Kales J, *et al: Clin Pharmacol Ther 12*:691-697, Jul-Aug 1971 **2.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975. **3.** Kales A, *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **4.** Kales A, *et al. Clin Pharmacol Ther 32*:781-788, Dec 1982 **5.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **6.** Dement WC, *et al: Behav Med*, pp 25-31, Oct 1978. **7.** Kales A, Kales JD: *J Clin Psychopharmacol 3*:140-150, Apr 1983. **8.** Tennant FS, *et al:* Symposium on the Treatment of Sleep Disorders, Teleconference, Oct 16, 1984 **9.** Greenblatt DJ, Allen MD, Shader RI. *Clin Pharmacol Ther 21*:355-361, Mar 1977.



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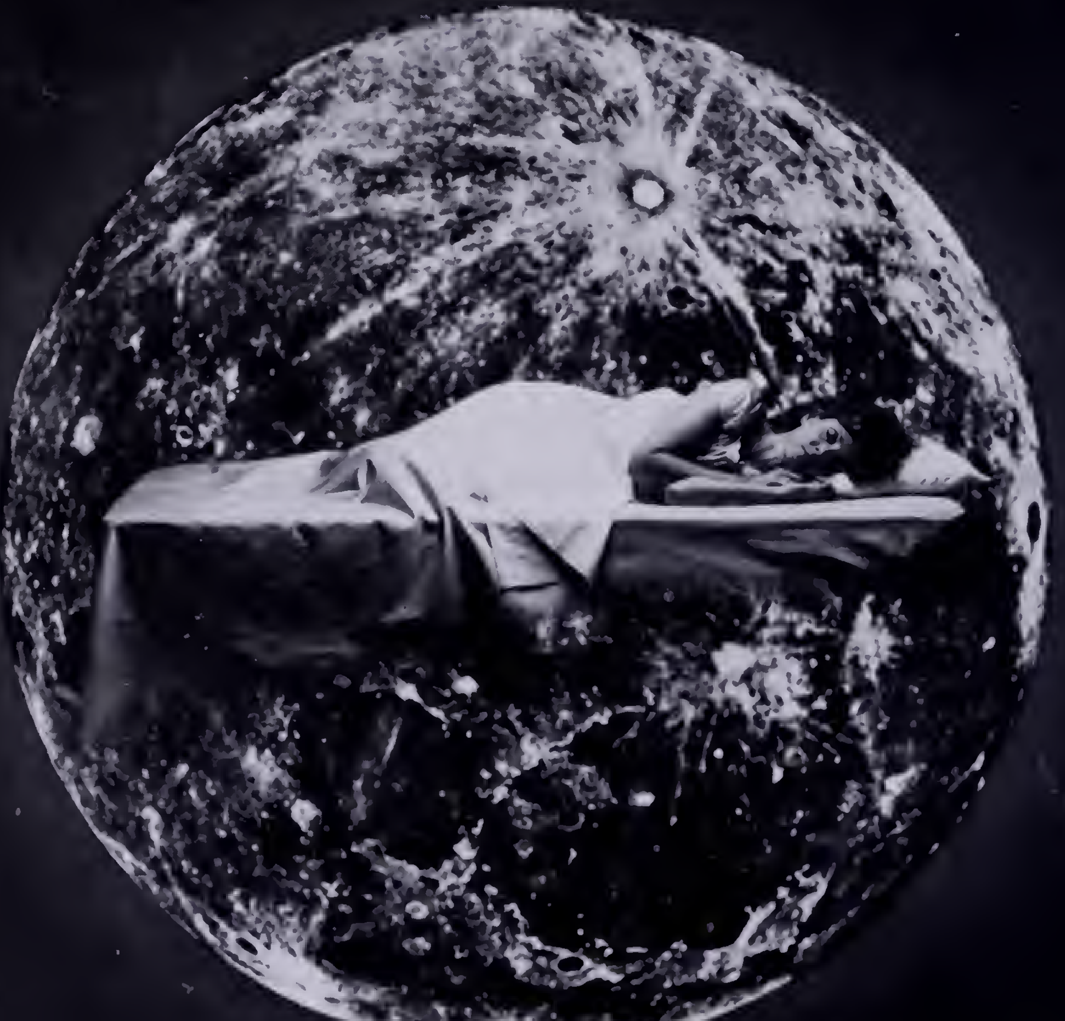

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